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## Teacher Preparation Reform Efforts: Perceptions of School Leaders and Teacher Educators

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TEACHER PREPARATION REFORM EFFORTS: PERCEPTIONS  
OF SCHOOL LEADERS AND TEACHER EDUCATORS

by

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A Dissertation

Submitted to the Graduate Faculty

of the

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in partial fulfillment of the requirements

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Doctor of Philosophy

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This dissertation, submitted by Ann M. Beste-Guldborg in partial fulfillment of the requirements for the Degree of Doctor of Philosophy from the University of North Dakota, has been read by the Faculty Advisory Committee under whom the work has been done and is hereby approved.

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## ABSTRACT

The purpose of this study was to examine the perceptions of teacher educators and school leaders regarding various proposed reform recommendations to the field of teacher preparation. School leaders and teacher educators, employed at public institutions in Minnesota, North Dakota, and Montana were surveyed. Data were analyzed statistically to determine differences in perceptions between groups.

The findings of the study indicate that school leaders and teacher educators agreed more often than not regarding the importance of the various reform recommendations. Among the differences between groups, school leaders favored accountability measures and alignment with K-12 standards while teacher educators preferred advancing teacher education as a university-wide priority and enhancing core curricula for teacher candidates.

In addition, participant perceptions of teacher warranties were also examined. School leaders favored this component of teacher education reform at a level almost twice that of teacher educators. Montana respondents showed the greatest percentage of responses favoring this aspect, followed by North Dakota, and Minnesota.

When asked to provide independent recommendations to enhance the field of teacher preparation, both groups provided similar responses to the open-ended questions. The need for early and sustained observation of research-based practice, faculty

engagement in K-12 schools, and enhanced financial support at all levels were common responses. Very few of the suggestions provided by respondents were aligned with the published policy reports.

Recommendations based on the findings of this study include the need for teacher education programs to offer enhanced opportunities for clinical practice, longer internships and improved curriculum. In addition, on-going communication and cooperation between K-12 schools, university programs, and policymakers as to what will ultimately enhance the preparation of teachers must continue. Lastly, more research must be conducted on the benefits and outcomes of teacher warranties as well as on the results of proposed teacher education reforms.



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## CHAPTER I

### INTRODUCTION

#### Prologue

In the words of one educator over 70 years ago:

There is no country in the world that witnessed so many educational reforms during the past generation as has the United States. It has been one nostrum or cure-all after another. We have tried to improve the educational system by shuffling school grades into new divisions with new names; by adopting, one after another, different methods of teaching; by trying this and then that and then another pattern of organizing curricular materials. Until recently, however, we have been obtuse to the fundamental factor, more important than all others put together—namely, the teacher... If I were seriously ill and in desperate need of a physician, and if by some miracle I could secure either Hippocrates, or a young doctor fresh from Johns Hopkins, I should of course take the young doctor. On the other hand, if I were commissioned to find a teacher for a high school and if by some miracle, I could secure either Socrates or the latest product of some teachers college, with all the latest technologies and techniques of teaching I would jump at the chance to get Socrates (Bagley, 1934, pp. 195-197).

#### Background

More than two decades ago, the federal landmark study of public education, *A Nation at Risk: An Education Manifesto*, informed the American people that their public schools were awash in a “rising tide of mediocrity” (National Commission on Excellence in Education, 1983). At that time, few thought the focal point of instructional controversy might turn toward the preparation and education of teachers. Today, collegiate programs, which prepare teachers, are under fire across the country for a perceived general lack of quality and rigor. “All children in the U.S.—no matter where



they live and who they are—deserve qualified teachers...yet many children do not have them..." (Wilson, Floden, & Ferrini-Mundy, 2001, p. 1).

In a 2002 report to Congress, former Secretary of Education, Rod Paige, concluded: "schools of education and formal teacher training programs are failing to produce the types of highly qualified teachers that the *No Child Left Behind Act of 2001* demands" (No Child Left Behind Act [NCLB], 2001, p. viii). Herring (2001) writes, in the early years of the 21<sup>st</sup> century, it has become "impossible to deny we have a crisis in teacher preparation" (p. 6). Finn (2006) concurs in a recently published article in *Education Next*: "as nearly everyone in education knows, something is wrong..." (p. 2).

Current research strongly suggests that student performance depends heavily on teacher competence (American Council on Education [ACE], 1999; Cochran-Smith, 2003a; Darling-Hammond & Sykes, 2003; Hart & Teeter, 2002). "The concern with teacher quality has been driven by a growing recognition, fueled by accumulating research evidence, of how critical teachers are to student learning" (Darling-Hammond & Sykes, 2003, p. 2). Studies have repeatedly shown that teacher expertise matters (ACE, 1999; Cochran-Smith, 2003b; Education Commission of the States [ECS], 2004). "There is little debate in the education community... that quality teaching and teacher preparation ought to be defined in terms of student learning" (Cochran-Smith, 2003a, p. 3). In education circles today, it is widely accepted that teachers exert a singularly powerful influence on the academic performance of students and some teachers are consistently more effective than others (ACE, 1999). A recent survey of the American public found that most people want better teachers in the nation's schools and that nine

out of ten adults support offering more thorough training so all teachers, beginning and experienced, can continue to learn and become better instructors (Hart & Teeter, 2002).

These findings, taken together, have sparked a demand for stricter standards and more rigorous control over the process of teacher preparation (Katz, 2004; National Council on the Accreditation of Teacher Education [NCATE], n. d. a; Zeichner, Melnick, & Gomez, 1996). "Since public education has...become a national imperative, and now we know teachers make a difference in student achievement, it is not surprising that the preparation of teachers is, again, coming under greater scrutiny" (ECS, 2004, p. 2).

The 21<sup>st</sup> century demands more of its students. "As society raises its expectations for student achievement, it must concomitantly raise standards for teachers" (NCATE, n. d. b, p. 19). The Federal Government, in its most recent reauthorization of the Elementary and Secondary Education Act, calls for highly qualified teachers for every classroom in America by the year 2006 (NCLB, 2001).

There is no doubt that the way this country prepares teachers must change (ECS, 2004; Cochran-Smith, 2003a; Davis, Williams, & Griffin, 2003; ACE, 1999) . The question is "how"? In 1991, educational reformer John Goodlad commented that teacher education had been an unstudied problem for three decades. Today, that is not the case. Over the last several years, multiple studies, financed by various educational and public policy organizations, have reviewed teacher preparation programs (Cross & Rigden, 2002). Even though there is general agreement that traditional teacher preparation programs must evolve to keep pace with student needs of the 21<sup>st</sup> century, there is a lack of agreement on what to do.



“Numerous recommendations have been advanced for improvement in the quality and effectiveness of teacher preparation programs” (Davis, Williams, & Griffin, 2003, p. 1). Following the release of *What Matters Most: Teaching for America's Future*, by the National Commission on Teaching and America's Future (NCTAF, 1996), debate surrounding teacher preparation intensified. Since that time, educational literature has overflowed with recommendations for the specific reform of teacher education programs (Davis, Williams, & Griffin, 2003). The question remains: which reform measures will increase the effectiveness of beginning teachers in the nation's public schools?

Public school leaders are also under pressure to increase accountability and improve student achievement. The *No Child Left Behind Act of 2001* requires all students to achieve proficiency with set standards or risk losing federal funding. As new standards for student learning have been introduced across the states, greater attention has been given to the role that teacher quality plays in student achievement (NCTAF, 1996). “Despite conventional wisdom that school inputs make little difference in student learning, a growing body of research suggests that schools can make a difference, and a substantial portion of that difference is attributable to teachers” (Darling-Hammond, 2000, p. 2). For this reason, schools must take steps to hire beginning teachers that are highly qualified and capable of achieving the new political mandates of education in the 21<sup>st</sup> century.

Too many American children in public schools continue to fail core subjects (Finn, 2006). Too many students leave school unprepared for the world at large (National Alliance of Business [NAB], 2001). Report after report points directly to inadequate preparation of teachers as one of the major culprits for widespread inadequacy

in student achievement (ACE, 1999; American Federation of Teachers [AFT], 2000; NAB, 2001; NCTAF, 1996; U.S. Department of Education [USDOE], 1999; Zimpher, 1999).

According to Darling-Hammond (2000), the single most important factor in student achievement is the expertise of the teacher. "It is the teachers who can make a difference" (Herring, 2001, p. 9). As the National Network for Educational Renewal (2003) proposes, "one cannot have better schools without good teachers, and one cannot have good teachers without better schools in which their initial and continuing education occurs" (p. 9). Amid all this controversy, one fact remains certain, there is no shortage of opinion about what it takes to prepare a high-quality teaching force (Davis, Williams, & Griffin, 2003).

### Problem Statement

Teacher education programs throughout the country are currently engaged in an encompassing reexamination of their programs (Center for Education Information, 1999; Cochran-Smith, 2001; Darling-Hammond, 2002). Numerous solutions designed to improve the preparation of teachers exist, but in reality, few programs have been able to consistently produce beginning teachers prepared for the difficult job that lies before them (Finn, 2006; NAB, 2001; Wilson, Floden, & Ferrini-Mundy, 2001). The reports are full of recommendations, but research is limited as to which reform approach will produce the type of teachers necessary to handle the 21<sup>st</sup> century classroom with its diverse learners and its multi-faceted dimensions (American Educational Research Association [AERA], 2005).



There is widespread consensus that teachers are what matter most in improving student achievement (AERA, 2005; AFT, 2000; Cochran-Smith, 2001; Darling-Hammond, 2002; NCTAF, 1996). “The demands placed on today’s teachers are considerable” (North Central Regional Educational Laboratory, [NCREL], 2001, p. 7). Significant debate surrounds the issue of how to truly improve the quality of teaching in the nation’s schools (ECS, 2004; USDOE, 2005b).

Margaret Spellings, current Secretary of Education, wrote in a recent report, “there is much yet to learn about teacher preparation and quality” (USDOE, 2005b, p. 69). This uncertainty has often led policymakers and educators, who do not have the comprehensive information they need to make good decisions, to ultimately adopt ineffective educational policies that do not necessarily support or improve student learning and achievement (Cochran-Smith, 2005; Darling-Hammond, 2002; Davis, Williams, & Griffin, 2003).

In addition, national, state, and university standards directly influencing teacher preparation programs may not relate to or impact standards affecting local school districts (Abel Foundation, 2001a; Ballou & Podgursky, 2000; Cross & Rigden, 2002). “Specifically, the goals and expectations of teacher education programs may not necessarily be congruent with those of local schools” (Abernathy, Forsyth, & Mitchell, 2001, p. 109). Explicit research focused on school leaders’ and teacher educators’ perceptions of teacher preparation reform, and its ability to produce the types of teachers capable of increasing student achievement is rare.

To that end, it is important that both teacher educators and public school leaders have the opportunity to provide comment on what may increase the quality of the teacher



in American classrooms (AERA, 2005; Black, 2004; Darling-Hammond & Bransford, 2005). An extensive review of the literature finds this research to be limited.

The current reform recommendations impacting teacher education come from a variety of highly respected and nationally recognized commissions and organizations that represent various distinct viewpoints (Davis, Williams, & Griffin, 2003). As a result, the recommendations are quite divergent. The question must be asked: Which teacher preparation reform efforts will provide the type of educators needed today in our public schools? Which reforms will produce highly qualified educators demanded by *The No Child Left Behind Act of 2001*?

Title II of the Higher Education Act requires states to implement teacher preparation program accountability measures and establish criteria for assessing teacher preparation programs (USDOE, 2005a). “Implementing higher grade point averages, academic degree experiences, and longer internships may have intuitive appeal, but we, as educational reformers, need to avoid a rush to change based on little supporting evidence just to respond to the calls for teacher education reform” (Davis, Williams, & Griffin, 2003, p. 12). Educational reformers must take care not to bring forward a variety of plans to “fix” teacher preparation based on unfounded practices. As the prologue suggests, the field has long swung from one initiative to another in search of a “cure”. “With increasing demands from the public for accountability, educators can no longer allow intuition to determine their decisions” (Poe, 2003, p. 4). Complacency is no longer an option (Finn, 2002).

## Purpose of the Study

A recent report of the American Educational Research Association (2005) entitled, *Studying Teacher Education*, sets forth and expands the research agenda on teacher preparation. "The balance between what is required of teachers, how they were trained, and what is offered to them as professional development opportunities has a significant effect on the quality of their classroom teaching" (NCREL, 2001, p. 7). One priority set forth in the AERA (2005) report is the need for research to identify specific factors in teacher education that contribute to improvements in student achievement. In addition, there is a growing emphasis on using research evidence to assess teacher education as well as to inform the accreditation process (Darling-Hammond & Bransford, 2005).

This study adds to the body of knowledge surrounding teacher education reform and K-12 student achievement. The purpose was to obtain perceptions of school leaders and teacher educators from three northern states concerning proposed teacher preparation reform recommendations and their perceived ability to enhance the quality of the teacher in the classroom. The research builds on the previous work of Arnold (1991), who studied school administrator's perceptions of teacher education reform as well as Davis, Williams, and Griffin (2003), who compared and contrasted various reports calling for the reform of teacher education. The following research questions were addressed:

1. What are the perceptions of teacher educators and school leaders regarding proposed teacher preparation reform recommendations and their ability to enhance the quality of the teacher in the classroom?

2. What are the differences in perceptions of teacher educators and school leaders regarding proposed reform recommendations to enhance the quality of the teacher in the classroom?
3. What are the differences in perceptions of elementary and secondary school leaders regarding proposed reform recommendations to enhance the quality of the teacher in the classroom?
4. What are the differences in perceptions of teacher educators preparing teachers for secondary education and those preparing elementary teachers regarding proposed reform recommendations to enhance the quality of the teacher in the classroom?
5. What are the differences in perceptions in respondents across the three states?
6. What are the differences in perceptions of teacher educators across teacher education program size?
7. What are the differences in perceptions of school leaders across public school size?
8. What are the perceptions of teacher educators and school leaders regarding teacher guarantees?
9. Is there a difference between teacher educator and school leader perceptions of teacher guarantees?
10. What three recommendations do teacher educators and school leaders report would have the most impact on enhancing the quality of the teacher in the classroom?



11. Are there differences in the three recommendations teacher educators and school leaders perceive would have the most impact on enhancing the quality of the teacher in the classroom?
12. What additional recommendations do school leaders and teacher educators have to enhance teacher education?

In addition, the study invited comment from teacher educators and school leaders regarding their personal thoughts on needed reform efforts in the field of teacher education.

### Definitions

Education Commission of the States – A bipartisan organization designed to help state officials study educational policy and issues (ECS, 2006).

Elementary School Leader - A principal or school leader, from a K-6 level school, who is responsible for hiring, supervising, and evaluating teachers.

NCLB - The No Child Left Behind Act of 2001. Federal education legislation, revising the Elementary and Secondary Education Act, that calls for reform in K-12 public education and sets rigorous accountability standards for schools.

Secondary School Leader - A principal or school leader, from a 7-12 level school, who is responsible for hiring, supervising, and evaluating teachers.

Teacher Educator - A professor of education who is responsible for preparing teacher candidates.

Teacher Preparation/Teacher Education Program - Any collegiate program that prepares teacher candidates.

### Assumptions

There are three central assumptions to this study. First, it is assumed that respondents will reply truthfully to the questionnaire. Second, that the school leaders and teacher educators selected are typical but not necessarily representative of the entire pool of school leaders and teacher educators. Finally, it is assumed that both the school leaders and teacher educators have sufficient knowledge about the statements on the survey to make judicious and intelligent responses.

### Delimitations

This study is delimited to teacher educators from public colleges and universities within the states of Minnesota, North Dakota, and Montana which have campus-based teacher education programs. It is further limited to elementary and secondary public school leaders from Minnesota, North Dakota, and Montana. In addition, only school leaders and teacher educators from these states that had published e-mail addresses were included in the study.

### Significance of the Study

Teacher education programs are currently facing the complex task of evaluating alternatives and varying instructional practices to suit the needs of the 21<sup>st</sup> century learner (Davis, Williams, & Griffin, 2003). Educational reforms are often undertaken without a research base, frequently at the helm of internal or external pressure (Cochran-Smith, 2004). In fact, a recent report by the American Educational Research Association (2005) determined that research on the impact of teacher preparation practices and policies is generally weak and inconclusive.

This study will increase the available research on suggested changes to teacher education programs by adding insight concerning the perceived effectiveness of proposed reforms within the field, from both the school leader and teacher educator perspective. It should benefit the discipline to learn which proposed reform recommendations the respondents, who are all active participants in the field of education, perceive as being most helpful in enhancing the quality of the teacher in the classroom. In addition, the study may assist in fostering collaboration between two important educational entities, the collegiate teacher education program and the public school. Both must continuously grapple with the enormous task of enhancing educational effectiveness in the new age of accountability.

### Overview of the Study

Reform of teacher education is a priority in the United States. The problem remains that the calls for reform often lack a foundation of research. Teacher educators and school leaders are in the best position to inform the practice of teacher education. This study aims to ask these constituents for their perceptions and comments regarding the numerous recommendations proposed.

Chapter I presented the background and purpose for the study, the research questions, and the significance of the study. Chapter II reviews the literature surrounding the reform of teacher education including writings in the areas of the political context for reform, effective teacher qualities, elements of effective teacher preparation, current reform recommendations, and emerging trends. Chapter III presents research methodology including a description of the population, instrumentation, and data analysis. Chapter IV presents and summarizes the results of the statistical analysis of

data. Finally, Chapter V summarizes the findings as well as presents the conclusions and recommendations generated from this study.



## CHAPTER II

### REVIEW OF THE LITERATURE

The literature review for this study is divided into five sections, that together set the context for reform of teacher preparation in the United States. The first section reviews the political climate influencing the field of teacher education and teacher education reform. Next, literature, delineating characteristics of effective teachers, is reviewed, as is the current status of teacher quality. The third section examines recent research on the essential elements of effective teacher preparation. Following that is a section that considers several teacher education reform proposals set forth by various educational and political groups. These are the proposals that are central to teacher preparation reform today. Finally some emerging trends in the field of teacher education are reviewed.

#### The Political Climate

“These have been tough political times for teacher education” (Jacobson, 2005, p. 36). For more than a decade, “teaching and teacher education have been pivotal issues in state and national elections and legislation” (Cochran-Smith, 2003b, p. 95). The Bush administration, along with many conservative political groups, has promoted an image of schools of education as being resistant to change. “When it comes to preparing teachers for the classroom, we’re still not moving fast enough to ensure long-term U.S. competitiveness” (Landgraf, 2006). According to Spellings, the international economy of



the 21st century is competitive and “as our children become young adults, they must have the skills developed through a strong education to keep our nation powerful” (USDOE, 2005b, p. 2). Sentiments like this have put the preparation of teachers under greater scrutiny than ever before (Jacobson, 2005).

In public opinion polls of what concerns Americans most, education has ranked higher than the economy, the environment, and crime (Cochran-Smith, 2001; Hart & Teeter, 2002). Teacher education has become a topic of national concern (Fenstermacher, 2002). Ensuring that America’s teachers are of the highest quality is an important national priority because they hold the key to student success (USDOE, 2005b).

Cochran-Smith (2002) writes:

One of the most pressing issues in teacher education today is the vigorous controversy among policy makers and others about whether or not there is a research base that justifies particular practices related to the preparation, certification, recruitment, retention, and entry routes of teachers (p. 283).

A recent U.S. Department of Education (2005b) report summarizes the issue by stating: “We can’t prepare 21<sup>st</sup> Century teachers by sending them to old-fashioned schools of education, we must prepare teachers to enter schools that themselves have undergone significant change” (p. 26). Schools have been dramatically transformed in response to the demands of a postmodern society and teachers must be prepared accordingly (Pines & Seidel, 1999).

Since the 1990s, it has become increasingly clear that trends in society combined with the current political climate, have placed the preparation of teachers at a crossroads (American Association of Colleges for Teacher Education, 1990, 2005). Even as the

political climate demands reform, serious disagreements remain surrounding what it takes to prepare teachers well and there have been dozens of reports that claim to have the answer (American Association of State Colleges and Universities [AASCU], 2004; ACE, 1999; American Federation of Teachers [AFT], 2000; Ballou & Podgursky, 2000; Carnegie Corporation of New York, 2001; Cochran-Smith, 2006; Finn & Petrilli, 2000; Kanstoroom, 1999; Klagholtz, 2000; NAB, 2001; NCTAF, 1996; State Higher Education Executive Officers [SHEEO], 1999; USDOE, 1999, 2002).

Questions have been raised whether and how teacher education makes a difference (Abell Foundation, 2001b; Bröder, 2001; Cochran-Smith, 2006; Darling-Hammond, 2001; Darling-Hammond, Chung & Frelow, 2002; Finn, 2006; Zeichner & Shulte, 2001). Differing conclusions on the effectiveness of teacher preparation in the United States are continually raised based on conflicting assumptions of teaching, learning, and schooling (Cochran-Smith, 2002).

To complicate the matter, the overall research base concerning the effectiveness of teacher preparation is relatively thin (AERA, 2005; Cochran-Smith, 2002; Wilson, Floden, & Ferrini-Mundy, 2001). Whatever the agenda, it is clear that the question facing teacher education today is one of “outcomes.” “How will we know when (and if) teachers and teacher candidates know and can do what they ought to know and be able to do (Cochran-Smith, 2001, ¶ 16)?

The politicalization of teacher education has caused a polarization of sides. As a result, several “hot-button” issues have emerged. The Abell Foundation, and other conservative organizations, have raised the question whether teacher preparation and certification positively correlate with K-12 student achievement (Abell Foundation,



2001b; Ballou & Podgursky, 2000; Grossman, 1989). The U. S. government would like the testing of teacher candidates as a measure of teacher education quality even when questions persist as to whether tests are truly adequate measures of quality teacher preparation (National Research Council, 2000; U.S. Department of Education, 2005a). Several “watchdog” groups have called for teacher warranties to protect school districts and teacher candidates from inadequate preparation by offering consumer assurances through financially backed “guarantees” (Cochran-Smith & Zeichner, 2002; Wilson, Floden, & Ferrini-Mundy, 2001).

The Holmes Group (1986, 1995) and the Carnegie Corporation (Carnegie Task Force on the Future of Teaching, 1986; Carnegie Corporation of New York, 2001) have worked diligently to strengthen teacher education through the promotion of intense coursework in pedagogy and subject matter. Leaders in these groups believe in promoting teacher education as the professional field it is. More conservative groups, such as the Fordham Foundation (Kanstoroom & Finn, 1999) and the Abell Foundation (2001a, 2001b), have questioned the need for any formal teaching preparation except subject matter knowledge. These groups prefer to deregulate the preparation of teachers. Debate rages between those favoring the professionalization of teacher education and those who wish to deregulate it (Abell Foundation, 2001a, 2001b; Carnegie Corporation of New York, 2001; Cochran-Smith, 2005; Fenstermacher, 2002; Holmes Group, 1995; Kanstoroom & Finn, 1999). Each side has generated reform recommendations.

Several proposed strategies to enhance teacher education have captured the attention of a variety of policymakers across the nation. Many have found their way into numerous pieces of legislation. The proposed strategies include standardized

accreditation, additional coursework, teacher testing, accountability measures for teacher preparation programs, required subject matter majors, and an increase in the duration of teacher preparation programs (Cochran-Smith, 2006; Darling-Hammond, 2000). As a result of this heightened interest, institutions across the country have looked to update their teacher preparation programs (Wenglinsky, 2000; Wilson, Floden, & Ferrini-Mundy, 2001). However, all of this has occurred in the absence of a strong research base (Davis, Williams, & Griffin, 2003).

A recent report released by the Center for the Study of Teaching and Policy found no rigorously conducted studies that focused on the direct relationship between policies and the quality of teacher preparation (Wilson, Floden, & Ferrini-Mundy, 2001). At best there is “little solid empirical research to support the adoption of policies intended to raise the quality of teacher preparation” (p. 25). Nevertheless, the changing face of K-12 education in the United States, coupled with a highly charged political atmosphere, just might spell the end of “business as usual” for traditional teacher preparation programs (ECS, 2000). “It is time for those who care about public education to join the debate, challenge emerging practices, and build quickly on those most promising, those where the bottom line is student learning” (Cochran-Smith, 2005, p. 15).

#### Teacher Effectiveness and Teacher Quality

There is vast consensus that the quality of teaching makes an important difference in student learning, yet over the past 50 years, researchers have studied the characteristics of an effective teacher with little agreement (Cochran-Smith, 2003a). “There is consensus about the importance of teacher quality, there is no parallel consensus about how to define it...” (Cochran-Smith, 2004). It is recognized that learning to teach is a



complex process that involves the integration of knowledge, skills, and dispositions shaped by both personal and professional experiences (Stoddart & Floden, 1996). The National Board for Professional Teaching Standards (NBPTS, 2006) has taken the lead in defining characteristics of “good” teachers and the Interstate New Teacher Assessment and Support Consortium (INTASC, 2006) has used this work to derive a set of standards new teachers should meet.

Critics, however, insist that these standards have no proven correlation to a teacher’s ability to promote student achievement (Ballou & Podgursky, 2000; ECS, 2005; Finn & Petrilli, 2000; Kanstoroom & Finn, 1999). In fact “highly qualified” teachers as defined by *The No Child Left Behind Act* are those who have obtained full state certification or have passed a state teacher-licensing exam (NCLB, 2001). The bill makes no mention of a requirement for college or university based teacher preparation (Cochran-Smith, 2003b).

“Effectiveness is an elusive concept when we consider the complex task of teaching” (Stronge, 2002, p. vii). An instructor must make over 3000 non-trivial educational decisions each day (Danielson, 1996). Because of this complexity, it is important for school leaders, as well as teacher educators, to understand and come to agreement about what defines a quality teacher.

“Over the past several years, a new consensus has emerged that teacher quality is...the most significant factor in student achievement and educational improvement” (Cochran-Smith, 2004, p. 3). Current research shows that effective teachers often have explicit general academic abilities specifically characterized by a high verbal ability (National Center for Education Statistics, 1999a). Capable teachers have long been

shown to possess a firm degree of subject matter and broad content knowledge (Darling-Hammond, 1998). Recent studies have found effective teachers to have a strong understanding of pedagogy and flexibility in their approach to students (AFT, 2000).

High quality teachers are knowledgeable about what they are teaching, skilled in how to teach children of different backgrounds and abilities, and are deeply committed to whom they are teaching (ECS, n. d. a). The National Council for the Accreditation of Teacher Education (n. d. a) recommends that good teaching requires educators to have thorough content and pedagogical knowledge as well as demonstrated teaching skills.

School administration research shows that principals prefer teachers who have the potential for competence in four professional practice domains as defined by Danielson (1996). These include effectiveness in instructional preparation and planning, successful classroom management, efficient delivery of instruction, and a vigilant maintenance of professional responsibilities such as accurate record keeping, communication with families, professional growth, and contributing to the school as a whole. In addition, studies show that principals hire teachers with positive school-based experiences. "Field experiences appear to be a way for students to make the type of impact...that principals view as critical in the hiring process" (Abernathy, Forsyth, & Mitchell, 2001, p. 116).

To complicate the issue, research results in the area of teacher effectiveness are mixed as to the satisfaction of school principals with their newly hired teachers. In a recent Missouri study, 70% of the principals felt that the new teachers they hired were well prepared (Zelazek, Williams, McAdams, & Palmer, 2000). Very few administrators say teacher quality is their most urgent problem (Metlife, 2001).



Most school leaders appear to feel that the competence of their new teachers is strong (Metlife, 2001; Zelazek et al., 2000). A hiring guide published by the National Association of Elementary School Principals (2000) suggests that “teacher preparation programs have grown more demanding since the 1970s, improving the pool of teacher candidates” (p.1). When asked what teacher preparation programs could do to enhance the quality of teachers sent to them, principals listed the pedagogical concepts of classroom management including discipline, subject specific teaching, instructional use of assessment, and the use of a wider range of instructional strategies as priorities (Oregon University, 2000).

In contrast, a recent Educational Testing Service (2004) publication reports that beginning teachers do not enter the classroom as finished products. A middle school principal affirms this statement: “Of the six new recruits I hired this year, four are gradually improving with coaching and mentoring. But two are so weak that, even with one-on-one help, I don’t think they’ll be back next year” (Black, 2004, ¶ 2).

Many teachers entering the field for the first time recognize the weakness of their preparation. According to a survey released by the National Center for Education Statistics (1999b), more than half of all new teachers considered themselves unprepared to meet many of the demands of 21<sup>st</sup> century classroom teaching. What then is the answer?

### Elements of Effective Teacher Preparation

Today’s teacher education programs face enormous challenges as they respond to an increasingly complex society and a rapidly changing technology-based economy (Darling-Hammond, 1998). As a result, there is much debate over the essential elements

of effective teacher preparation and while there is some research to draw upon to address this controversy, little of it is undisputed (ECS, 2000).

An educational watchdog group, Public Agenda (2003), summed up the issue in one of its publications:

Superintendents, principals and teachers say teacher education should put more emphasis on classroom realities, and there is a broad and firm consensus that good teaching requires far more than strong command of the subject to be covered. Opinion research does suggest that the priorities of professors of education—the teachers of teachers—are vastly different from those of parents and the public, and to some extent, of teachers as well (p. 6).

The Holmes Group (2006), a consortium of education deans organized around the twin goals of reforming teacher preparation and the teaching profession itself, has published several accounts of teacher education. In 1995, the group published a report entitled *Tomorrow's Schools of Education* which lambasted teacher education programs for being slipshod and inconsistent.

Over 1,200 institutions of higher education and a growing number of nonprofit corporations now educate teachers for work in America's schools, some offer excellent preparation for those who teach, others provide shoddy preparation that angers and embarrasses those who care deeply about the minds and welfare of America's young (Holmes Group, 1995, p. 21).

Traditionally, teacher education programs often complied with state-based or external accreditation criteria or standards such as those put forth by the National Council for the Accreditation of Teacher Education (NCATE) and the Teacher Education Accreditation Council. The U.S. Department of Education recognizes the NCATE as the premier accrediting body for schools, colleges, and departments of education (Mitchell, 2000; Williams, Mitchell, & Leibbrand, 2003). Currently 623 of the approximately 1200



schools and colleges of teacher education in the United States are accredited and nearly 100 others are candidates for accreditation (NCATE, 2006). Even so, recent research offers no hard evidence that compliance with these performance-based standards produces a “higher quality” teacher capable of increasing student achievement (AFT, 2000).

Another common practice in teacher preparation, backed up with only scant evidence, is the requirement that prospective teachers pass a licensure examination before graduation. In fact, most states require teachers to pass one of several exams in order to achieve state certification as a professional educator. Today, it is recognized by some that “test scores are a necessary but insufficient way of measuring the effectiveness of teacher preparation...” (Cochran-Smith, 2006, p. 23). Although many policymakers have set out to prove the value of the professional licensure examination as a part of state certification, at best the value is only marginal (National Council on Teacher Quality, n. d.).

Certification itself has been at the center of controversy. A report issued by the Abell Foundation (2001a) purports that there is “no credible research that supports the use of teacher certification” (p. 1). In addition this same report jabs the common process of teacher preparation by asserting that “the requirement that individuals must complete a prescribed body of coursework before teaching in a public school is deeply misguided” (p. iii). Darling-Hammond (2001), a prominent educational researcher, has actively argued this viewpoint in both research and policymaking.

There is robust agreement in the research that strong subject matter knowledge is critical in enhancing student performance (Carnegie Corporation of New York, 2006;

Cochran-Smith, 2003a; Darling-Hammond, 1998; ECS, 2005; National Council on Teacher Quality, n. d.). Discrepancy exists; however, in the manner in which teacher education programs are establishing this knowledge in their graduates (Carnegie Corporation of New York, 2001). Some teacher preparation programs are eliminating the undergraduate education degree and requiring teachers to have majors in an academic subject before entering a teacher education master's degree program (ACE, 1999; AFT, 2000; NCTAF, 1996). Others are establishing special subject-matter courses within the undergraduate teacher preparation program (Goodlad, 1998; NAB, 2001; USDOE, 1999). While little is known regarding the optimum subject matter training, it appears that strong preparation in a secondary teacher's intended subject area adds significant value to their teaching ability. Less is known about the breadth and depth of subject matter training needed for effective teaching at the elementary level (ECS, 2004; Murray, 2005).

Knowledge of pedagogy, or the skill of teaching, is another subject of significant controversy within the field of teacher education. One viewpoint holds that teachers need rigorous training in both educational theory and pedagogical skills to effectively teach diverse learners (NCTAF, 1996). People and organizations advocating this perspective believe in the professionalization of teacher education (Cochran-Smith, 2006). The opposing side, stringently proposed by the Fordham Foundation, holds that teaching skill is best acquired through on-the-job experience and that new teachers need only minimal pedagogical knowledge (Kanstoroom & Finn, 1999). This perspective is known as the deregulation movement and appears to be one of the driving political forces facing teacher education today (Cochran-Smith, 2006).



Finally the timing of various teacher preparation components has been the source of significant controversy. Debate has arisen regarding the appropriate length of teacher training (American Association of Colleges for Teacher Education [AACTE], 2005; AASCU, 2004; AFT, 2000; Black, 2004; Cochran-Smith, 2001; NAB, 2001). Should the program be 4 years, 5 years, or Master's level? At this point, there is no definitive research that settles this question.

Similarly, there is deliberation regarding the appropriate amount of field experience prospective teachers should engage in as a part of their preparation program (AASCU, 1999; AFT, 2000; Murray, 2005; NAB, 2001; NCTAF, 1996). Though no set amount is noted as sufficient, the research is clear that "solid field experience under good supervision with a master teacher produces teachers who are more effective in the classroom than teachers whose preparation lacks a strong experiential component" (ECS, 2000).

How then, with all of the dissention and ambiguity within the field, can the nation's colleges and universities ensure that teacher preparation programs adequately equip educators to meet the demands of the 21<sup>st</sup> century classroom? How will programs show "valid and reliable evidence" that teacher education programs are turning out teacher candidates capable of high performance (Murray, 2005)?

#### Teacher Preparation Reform Recommendations

"America is on a mission, a search to improve the way it does everything so it can stay globally competitive...and so it is with education" (Negroni, 1992). American education is undergoing the most dramatic self analysis since its early history. Teacher education is no exception. "During the last decade, some of the most highly publicized



and politicized debates have focused on the evaluation of teacher education programs” (Cochran-Smith, 2006, p. 20).

Beginning in the mid to late 1990s, several prominent organizations studied the “problem” of teacher education and published their findings and recommendations. The first was the National Commission on Teaching and America’s Future (NCTAF). Established in 1994 as a nonprofit organization, it is a nonpartisan group dedicated to improving the quality of teaching in the nation’s schools. Its mission is to “provide every child with competent, caring teachers in schools organized for success” (NCTAF, 2006, ¶ 1).

The commission is made up of members from various education groups and has partnerships in twenty-two states across the nation. It was the first organization to join the current foray of teacher education reform. Based on a two-year study of the educational conditions across the nation, the commission’s report, *What Matters Most: Teaching for America’s Future*, defined several major flaws in teacher preparation and listed specific recommendations for systemic change (NCTAF, 1996). This report and its accompanying recommendations put teaching quality at the center of the nation’s educational agenda.

Among the recommendations from NCTAF (1996) were the following:

1. An insistence on accreditation for all schools of education
2. The closure of inadequate schools of education
3. Licensure of teachers based on demonstrated performance in subject matter, teaching knowledge, and teaching skill
4. Organization of teacher preparation around standards

5. Development of extended, graduate-level teacher preparation programs that provide a year-long internship in a professional development school

In addition, the report advanced the premise that teacher quality plays a paramount role in public school reform as well as the academic achievement of K-12 students (NCTAF, 1996). This report and its resultant recommendations sparked intense debate within the field of teacher education and served as the catalyst for further academic study and policymaking (Davis, Williams, & Griffin, 2003).

In 1999, the United States Department of Education (USDOE), in response to the NCTAF report, published its own document describing the current state of teaching in the United States. A governmental bureau created in 1980, the Department of Education's lawfully granted mission is to "ensure equal access to education and to promote educational excellence throughout the nation" (USDOE, 2006, ¶ 6). It was initially established as a politically driven agency and remains that way today.

The Department of Education report, *A Talented, Dedicated, and Well-Prepared Teacher in Every Classroom*, noted, "educators, policymakers, and legislators have become increasingly aware that our nation's goals for student learning depend on good teaching in all our schools" (USDOE, 1999, p. 2). Critical of teacher preparation programs, the report cited flawed teacher preparation as a barrier to successful education reform. Specifically, the field of teacher education is accused of being too focused on theory, disconnected from Arts and Sciences, and detached from the public schools (Davis, Williams, & Griffin, 2003).

The USDOE challenged higher education to:

1. Make the preparation of teachers a university-wide priority



2. Develop stronger links between Colleges of Arts and Sciences and Colleges of Education to ensure teachers have strong content knowledge
3. Develop stronger links between institutions of higher education and local schools to ensure that future teachers develop the strong skills needed to teach
4. Be accountable for high-quality teacher preparation

The report's recommendations highlighted the need for shared responsibility and accountability between institutions of higher learning, their schools of education, and the individual programs of teacher preparation (USDOE, 1999).

Also in 1999, spurred by the NCTAF's call for model practices to reinvent teacher preparation, the State Higher Education Executive Officers organization (SHEEO) published a review of three states' efforts to align teacher education and professional development programs with reform efforts at the P-12 level (Zimpher, 1999). SHEEO is a "non profit, nationwide association of the chief executive officers serving statewide coordinating and governing boards of postsecondary education" (SHEEO, 2006, ¶ 1). Its mission is to shed light on the demands and challenges facing higher education at both the federal and state level.

This organization's brief is entitled, *Teacher Quality and P-16 Reform: The State Policy Context* (Zimpher, 1999). It offered the following suggestions to strengthen the preparation of quality teachers as a concurrent emphasis with P-12 reform:

1. Develop policies that support state-level joint councils or partnerships to coordinate and enhance the activities so that implementation will have the greatest possible impact.



2. Institutionalize partnerships at colleges, universities, and local schools using shared resources.
3. Increase the commitment to university-wide support for teacher education developing strategies that require program integration between colleges of arts and sciences, schools of education, and other programs serving the needs of children and their families.
4. Align state policies on teacher quality with the needs and concerns of education constituency groups to ensure that implementation is possible and policy goals are achieved.

SHEEO's report highlighted the extraordinary need for cooperation and commitment between and among universities, local school districts, and other public service agencies to bring about systemic change. It also encouraged the development of additional initiatives in states throughout the nation (Davis, Williams, & Griffin, 2003).

Also in 1999, the American Council on Education (ACE), a leader in establishing public policy for higher education, representing at least 1,800 degree granting colleges and universities across the country, published a third report on the quality of teacher preparation in the United States (ACE, 2006). It was called, *To Touch the Future: Transforming the Way Teachers are Taught. An Action Agenda for College and University Presidents* (ACE, 1999). The report's recommendations were similar in many ways to the SHEEO brief (Zimpher, 1999). The goal was to influence public policy through university-wide advocacy of effective teacher education (ACE, 2006).

The report called for the presidents of the nation's colleges and universities to take the lead in influencing improvements in the quality of teacher preparation. It also

emphasized the important role higher education played in increasing the effectiveness of K-12 student achievement and portrayed the education provided to teacher candidates as a critical element in determining the quality of the nation's schools (Davis, Williams, & Griffin, 2003).

The ACE (1999) report set forth the following agenda to strengthen teacher education:

1. College and university presidents must take the lead in moving the education of teachers to the center of the institutional agenda.
2. Presidents need to clarify and articulate the strategic connection of teacher education to the mission of the institution.
3. Presidents should mandate a campus-wide review of the quality of their institutions' teacher preparation programs.
4. Presidents and governing boards should commission rigorous, periodic independent appraisals of the quality of their institutions' teacher preparation programs.
5. Presidents must require that education faculty and courses are coordinated with Arts and Sciences faculty and courses.
6. Presidents should ensure that their teacher preparation programs have the necessary equipment, facilities, and personnel to educate future teachers in the use of technology.
7. Presidents of Graduate and Research universities have a special responsibility to be advocates for graduate education, scholarship and research in the education of teachers.

8. College and university leaders should strengthen inter-institutional transfer and recruitment processes.
9. Presidents should ensure that graduates of their teacher preparation programs are supported, monitored, and mentored.
10. Presidents should speak out on issues associated with teachers and teaching and should join with other opinion leaders to shape public policy.

The American Council on Education (1999) founded this action agenda on the premise that college and university presidents bore the leadership responsibilities to elevate the education of teachers to a position of prominence within the institution. Only at that point would teacher education realize the financial and academic support necessary for successful transformation and reform.

The American Federation of Teachers (AFT) soon reacted to the foray surrounding teacher preparation. The AFT is a teacher's union affiliated with the AFL-CIO. It is the largest higher education union in the country, representing approximately 150,000 higher education faculty, professional staff, and graduate employees (AFT 2006). Founded in 1916, its mission is multifaceted with the ultimate goal of improving the quality of education through professional advocacy (2006). In 2000, it released its report proposing changes to teacher education from a union perspective.

At the center of the 2000 AFT investigation into teacher preparation was the view that the "best way to bring an adequate supply of well-trained teachers into the classroom is not by avoiding collegiate teacher education, but rather by strengthening it" (p. 14). The report entitled, *Building a Profession: Strengthening Teacher Preparation and*



*Induction* (AFT, 2000), proposes a set of recommendations for “reshaping” teacher preparation:

1. Require core liberal arts courses that provide broad coverage and a solid foundation in subjects and information relevant to K-12 curriculum standards. These courses should be required prior to admission to teacher education.
2. Institute higher entry criteria for admission to teacher education—a 2.75 (phased up to 3.0) grade point average required at the end of the sophomore year.
3. Institute a national entry test, which requires college-level proficiency in the areas of mathematics, science, English, and history/geography/social studies.
4. Require an academic major for all teacher education candidates. The major should be rigorous and comprehensive enough to enable candidates to understand their content and help their students meet K-12 education standards.
5. Develop core curricula in pedagogy that is data-based and includes research on how students learn as well as on effective content-specific teaching methods.
6. Strengthen the clinical experience.
7. Institute a rigorous exit/licensure test that includes subject matter and pedagogy.

8. Restructure teacher education as a five-year process, which includes intensive clinical experience for which the candidate is compensated.

The American Federation of Teachers (2000), in its report, acknowledged that reshaping teacher preparation will require “political will, money, culture and attitude change both in the universities and in the public schools” (p. 41).

In 2001, the National Alliance of Business (NAB), a private coalition of conservative business/education partners advocating standards-based reform, published a report challenging business leaders, policymakers, governors, school boards, and educators to advocate for standards, assessment, and accountability in the nation’s schools (NAB, 2001; 2006). NAB’s overarching goal is to increase student achievement and improve the competitiveness of the workforce through initiatives focused on school-to-career, teacher quality, and science instruction (2006).

The report entitled, *Investing in Teaching*, identified a set of recommendations that among other items, called for a new model of teacher education (NAB, 2001). The NAB stressed that children in our nation’s schools need teachers who can meet a “higher threshold” and acknowledged that “efforts are destined to fail without high quality teachers in every classroom” (p. 6). The proposed recommendations were as follows:

1. Raise the bar for admission to teacher education to at least 3.0 in the first two years of a coherent core of liberal arts courses.
2. Require all teacher preparation programs to be accredited.
3. Require all teacher candidates to complete an academic major and at least one minor.

4. Establish a performance-based licensing system that is aligned with professional standards and measures subject matter knowledge and content pedagogy.

The NAB (2001) report also advocated raising teacher standards by developing a new model of teacher education and professional development, tying pay to performance, and establishing a new educational environment that provides teachers with the freedom and flexibility to achieve results.

The Carnegie Corporation of New York (2006), an independent policy and research center whose charge is “to do and perform all things necessary to encourage, uphold, and dignify the profession of the teacher and the cause of higher education” (§ 1), also challenged institutions to “design imaginative, dynamic new models for the preparation of effective teachers” (2001, p. 2). Its report, *Higher Education’s Challenge: New Teacher Education Models for a New Century* (Carnegie Corporation of New York, 2001), recognized the current crisis in teacher education and emphasized that raising the quality of teaching was a critical component to the success of the nation’s public schools.

The Carnegie report recommended the following:

1. Arts and sciences faculty and education faculty must form active partnerships in order to design teacher preparation models that will produce the highest quality teachers.
2. University leaders must develop university-wide policies that will insure that such partnerships are enjoined, supported, and monitored.
3. Higher education institutions must expand these partnerships to include involvement in the local school districts and K-12 schools.



4. Higher education must address teacher preparation as the clinical practice profession it is. Schools of education should serve as “teaching hospitals” and new teachers should be followed for at least two years and guaranteed the expert, formal support, supervision, and mentoring which are mandated for comparable clinical internships.
5. Higher education must embrace accountability and find meaningful and productive ways to measure the quality of teacher preparation.
6. Higher education must make a life-long commitment to the students they have trained as teachers. Professionals only remain professional if they continue to learn, to hone their skills, and to have access to and participate in a dynamic professional community.

At the conclusion of this report, the Corporation restated its long-standing commitment to provide support to institutions that emerge as leaders in meeting the teacher preparation reform challenge (Carnegie Corporation of New York, 2001).

After conducting a more recent scan of teacher preparation issues the American Association of State Colleges and Universities (AASCU), a coalition of state institutions representing more than 400 public colleges, universities, and systems of higher education across the United States, released an update of its 1999 report (1999, 2004, 2005). Identifying several key issues remaining in the reform of teacher preparation, this document, *Teacher Education: Scan of Issues, Roles, Activities, and Resources* (AASCU, 2004), makes the following challenges to its member schools:

1. Make the entire institution responsible for teacher education, not just colleges of education.

2. Promote closer contact between higher education faculties and school district personnel
3. Recognize the need for field experience earlier on, as well as the importance of course and field experience sequence.
4. Improve technology skills of prospective teachers.
5. Establish induction programs as essential components of teacher preparation programs.

With the release of this report, the AASCU (2004) recognizes as seminal the importance of two main initiatives. Those that create strong links between public schools and institutions of higher learning as well as those that have a clear focus on school improvement and student success.

The reports reviewed for this research study represent nationally recognized and respected commissions and organizations that have legitimate concerns about the quality of teachers in our nation's schools (Davis, Williams, & Griffin, 2003). Differences in specific recommendations are understandable given the distinctive roles of the target audiences in the reform effort as well as the varying political agendas and interests targeted by each of the organizations.

In the current climate of intense debate surrounding teacher preparation, it is important to understand or at least be aware of the agenda behind each report and the proposed recommendations for reformation (Cochran-Smith, 2002; Darling-Hammond, Chung, & Frelow, 2002). Although the recommendations presented in the reports reflect a diversity of viewpoints and professional agendas, the underlying theme that teacher preparation programs need to be held accountable for the candidates they graduate and



their impact on K-12 learner outcomes is unmistakable (Davis, Williams, & Griffin, 2003). Ultimately the only true evidence of good teaching is the impact a teacher has on his or her students (ECS, 2005). Today's trends in teacher preparation have the potential to bring about real change in the field of teacher education; however, practice must be guided by the understanding that the "bottom line" must always be enhanced learning and student achievement (Cochran-Smith, 2006).

The reviewed reports focus on improving teacher preparation programs and, as a result, teacher quality through a variety of initiatives and reforms. Together they present many varied recommendations for improving the field of teacher education. Table 1 presents a summary of the key issues from the reports discussed in the review of the literature.

Table 1. Teacher Education Reform Report Summary

Report and Organization	Recommendations
<p>Teacher Education: Scan of Issues, Roles, Activities, and Resources</p> <p>American Association of State Colleges and Universities (2004)</p>	<ul style="list-style-type: none"> <li>• Make the entire institution responsible for teacher education, not just colleges of education</li> <li>• Promote closer contact between higher education faculties and school district personnel</li> <li>• Recognize the need for field experience earlier on, as well as the importance of course and field experience sequence</li> <li>• Improve technology skills of prospective teachers</li> <li>• Establish induction programs as essential components of teacher education programs</li> </ul>
<p>To Touch the Future. Transforming the Way Teachers are Taught. An Action Agenda for College and University Presidents</p> <p>American Council on Education (1999)</p>	<ul style="list-style-type: none"> <li>• College and university presidents must take the lead in moving the education of teachers to the center of the institutional agenda</li> <li>• Presidents need to clarify and articulate the strategic connection of teacher education to the mission of the institution</li> <li>• Presidents should mandate a campus-wide review of the quality of their institutions' teacher education programs</li> <li>• Presidents and governing boards should commission rigorous, periodic independent appraisals of the quality of their institutions' teacher education programs</li> <li>• Presidents must require that education faculty and courses are coordinated with Arts and Sciences faculty and courses</li> <li>• Presidents should ensure that their teacher education programs have the necessary equipment, facilities, and personnel to educate future teachers in the use of technology</li> </ul>



Table 1 cont.

	<ul style="list-style-type: none"> <li>• Presidents of Graduate and Research universities have a special responsibility to be advocates for graduate education, scholarship and research in the education of teachers</li> <li>• College and university leaders should strengthen inter-institutional transfer and recruitment processes</li> <li>• Presidents should ensure that graduates of their teacher education programs are supported, monitored, and mentored.</li> <li>• Presidents should speak out on issues associated with teachers and teaching and should join with other opinion leaders to shape public policy.</li> </ul>
<p>Building a Profession: Strengthening Teacher Preparation and Induction</p> <p>American Federation of Teachers (2000)</p>	<ul style="list-style-type: none"> <li>• Require core liberal arts courses that provide broad coverage and a solid foundation in subjects and information relevant to K-12 curriculum standards. These courses should be required prior to admission to teacher education.</li> <li>• Institute higher entry criteria for admission to teacher education—a 2.75 (phased up to 3.0) grade point average required at the end of the sophomore year.</li> <li>• Institute a national entry test, which requires college-level proficiency in the areas of mathematics, science, English, and history/geography/social studies.</li> <li>• Require an academic major for all teacher education candidates. The major should be rigorous and comprehensive enough to enable candidates to understand their content and help their students meet K-12 education standards.</li> <li>• Develop core curricula in pedagogy that is data-based and includes research on how students learn as well as on effective content-specific teaching methods.</li> <li>• Strengthen the clinical experience. Institute a rigorous exit/licensure test that includes subject matter and pedagogy.</li> <li>• Restructure teacher education as a five-year process with intensive clinical experience for which the candidate is compensated.</li> </ul>
<p>Higher Education's Challenge: New Teacher Education Models for a New Century</p> <p>Carnegie Corporation of New York (2001)</p>	<ul style="list-style-type: none"> <li>• Arts and sciences faculty and education faculty must form active partnerships in order to design teacher education models that will produce the highest quality teachers.</li> <li>• University leaders must develop university-wide policies that will insure that such partnerships are enjoined, supported, and monitored.</li> <li>• Higher education institutions must expand these partnerships to include involvement in the local school districts and K-12 schools.</li> <li>• Higher education must address teacher education as the clinical practice profession it is. Schools of education should serve as "teaching hospitals" and new teachers should be followed for at least two years and guaranteed the expert, formal support, supervision, and mentoring which are mandated for comparable clinical internships.</li> <li>• Higher education must embrace accountability and find meaningful and productive ways to measure the quality of teacher education.</li> </ul>

Table 1 cont.

	<ul style="list-style-type: none"> <li>Higher education must make a life-long commitment to the students they have trained as teachers. Professionals only remain professional if they continue to learn, to hone their skills, and to have access to and participate in a dynamic professional community.</li> </ul>
<p>Investing in Teaching</p> <p>National Alliance of Business (2001)</p>	<ul style="list-style-type: none"> <li>Raise the bar for admission to teacher education to at least 3.0 in the first two years of a coherent core of liberal arts courses.</li> <li>Require all teacher education programs to be accredited.</li> <li>Require all teacher candidates to complete an academic major and at least one minor.</li> <li>Establish a performance-based licensing system that is aligned with professional standards and measures subject matter knowledge and content pedagogy.</li> </ul>
<p>What Matters Most: Teaching for America's Future</p> <p>National Commission on Teaching and America's Future (1996)</p>	<ul style="list-style-type: none"> <li>An insistence on accreditation for all schools of education</li> <li>The closure of inadequate schools of education</li> <li>Licensure of teachers based on demonstrated performance in subject matter, teaching knowledge, and teaching skill</li> <li>Organization of teacher education around standards</li> <li>Development of extended, graduate-level teacher education programs that provide a year-long internship in a professional development school</li> </ul>
<p>Teacher Quality and P-16 Reform: The State Policy Context</p> <p>State Higher Education Executive Officers (1999)</p>	<ul style="list-style-type: none"> <li>Develop policies that support state-level joint councils or partnerships to coordinate and enhance the activities so that implementation will have the greatest possible impact</li> <li>Institutionalize partnerships at colleges, universities, and local schools using shared resources</li> <li>Increase the commitment to university-wide support for teacher education developing strategies that require program integration between colleges of arts and sciences, schools of education, and other programs serving the needs of children and their families.</li> <li>Align state policies on teacher quality with the needs and concerns of education constituency groups to ensure that implementation is possible and policy goals are achieved</li> </ul>
<p>A Talented, Dedicated, and Well-Prepared Teacher in Every Classroom: Information Kit</p> <p>United States Department of Education (1999)</p>	<ul style="list-style-type: none"> <li>Make the preparation of teachers a university-wide priority</li> <li>Develop stronger links between Colleges of Arts and Sciences and Colleges of Education to ensure teachers have strong content knowledge</li> <li>Develop stronger links between institutions of higher education and local schools to ensure that future teachers develop the strong skills needed to teach</li> <li>Be accountable for high-quality teacher education</li> </ul>

### Emerging Trends and Promising Practices

There are several emerging trends in the field of teacher education. Among them are four, which have the potential for strengthening the preparation of teachers through



increased collaboration between P-12 schools and institutions of higher learning. None are new ideas, but today each is receiving renewed attention as the quest to enhance teacher education advances to the forefront of public policy.

### *Professional Development Schools*

Since the mid to late 1980s, the National Network for Educational Renewal, along with the Holmes Group, and the Education Commission of the States, has emphasized the importance of the link between universities and public schools (Abdal-Haqq, 1989).

These groups have advocated the use of public schools as professional practice sites, a sort of “teaching hospital” (Sedlak, 1987). Known by different names, the overall goal of these types of programs is to maximize teacher candidate performance and achievement through the use of applied inquiry (AACTE, 2006).

Many colleges and universities across the nation are now creating these types of partnerships with elementary and secondary schools in an effort not only to incorporate the use of applied inquiry, but also to extend the time teacher candidates spend in schools and classrooms (Cross & Rigden, 2002). Research has placed emphasis on the need for teacher candidates to have more and varied actual classroom experience in their preparation programs (Center for Education Information, 1999). “Teacher candidates learn best when the content and structure of their program of study in higher education closely corresponds with the experiences they have in K-12 schools during their preparation” (National Association of State Boards of Education, 2000, p. 12).

In order to build the skills today’s teachers will need to improve student achievement, premier teacher preparation programs are focusing on integrating student field experiences throughout the curriculum (USDOE, 2005a). Many teacher education



programs have developed “year-long” internships for teacher candidates to help develop these skills. By establishing professional development or “clinical” schools in partnership with P-12 schools, these programs serve not only to enhance the professional training of teachers but also to bridge the gap that has traditionally existed between practicing teachers and colleges of education (Cross & Rigden, 2002).

According to the Holmes Group (2006), there are three major purposes for Professional Development Schools: to improve the education of prospective and practicing teachers, to strengthen knowledge and practice in teacher education, and to strengthen the profession of teaching by serving as models of promising and productive relationships. “Professional development schools are designed to be outstanding public schools, cooperatively established and maintained by schools of education and selected school districts” (Abdal-Haqq, 1989, p. 2). The increased involvement with one another is a “win-win” situation for all concerned, the teacher, the teacher candidate, the student, the university, and the P-12 school (Poe, 2003).

Professional Development Schools have been around for almost three decades and have met with varied success. Today there is renewed interest in them as a means to enhance the preparation of teachers. The National Association of State Boards of Education (2000), in one of its briefs, sums up the potential of these schools:

Both individuals preparing to be teachers and those who prepare them need to be involved in the day-to-day work of K-12 schools. Not only does work in K-12 schools give everyone a vested interest in the schools success, but it is also a critical way to develop intimate knowledge of what teaching in a K-12 school entails (p. 14).

An Oregon study reveals that principals often have difficulty providing high-quality student teaching placement opportunities for prospective teachers (Oregon

University, 2000). The expansion of professional development schools, where universities and local school districts share resources and responsibilities, may help to alleviate this difficulty. These partnerships will improve the ability of all involved to provide a variety of high-quality clinical experiences for all involved (Cross & Rigden, 2002). Professional development schools provide a way for the teacher candidate to experience earlier, longer, and more intensive field-based placements in public schools and a way for university faculty to connect methods classes and clinical supervisors directly to the process (ECS, 2004).

Again, the National Association of State Boards of Education (2000) clearly points out the advantages:

Not only do teacher candidates need to have consistent, focused experience in K-12 schools, but evidence suggests that teacher preparation curricula are enhanced when university faculty have recent, substantial experience researching, teaching, or collaborating with staff in K-12 schools. In essence, even the most accomplished university faculty cannot teach what they do not know, and so teaching about life in schools, the daily work of teachers, and bringing K-12 students to high standards is best done by faculty with experience in these areas (p. 16).

The hallmark of the Professional Development School is collaboration between university and school personnel (Abdal-Haqq, 1989), the benefit being an integrated professional culture in which ongoing professional development is encouraged across experience levels from the teacher candidate right through to the university faculty responsible for preparing tomorrow's teachers (Johnson & Kardos, 2001). Levine (1988) named the function of the Professional Development School to be induction, a place for new teachers to hone their skills in the shelter of an experienced site. The Holmes Group



(1986) calls it a place of clinical instruction and professional socialization for new and veteran teachers alike.

### *Mentoring and Induction*

A number of studies have shown that mentoring and induction programs are very effective in retaining beginning teachers, as well as enhancing the effectiveness of these new teachers (ECS, 2000; Feiman-Nemser, 2003; McRobbie, 2000; National Governor's Association, 2002; Oregon University, 2000). According to Spellings, the strategy of supporting novice teachers through mentoring and induction is critical for teacher preparation programs (USDOE, 2005b).

In recent years, a common policy response to pressures concerning the efficacy of teacher preparation and its graduates has been the establishment of mentoring or induction programs (Earley, 2000). Often these involve both teacher education faculty and experienced classroom teachers working together as teacher assistance teams.

It is true that "the questions and uncertainty that new teachers bring to school require far more than orientation meetings, ...directions to the supply closet, and a written copy of the school's discipline policy" (Johnson & Kardos, 2001, p. 13). There is documented need for teacher education programs and employers to ensure a smooth induction into the profession of teaching (AFT, 2000; Black, 2004; Checkley & Kelly, 1999; Cochran-Smith, 2006; Darling-Hammond, 2002; Feiman-Nemser, 2003; Johnson & Kardos, 2001).

Learning to teach is a long process (Checkley & Kelly, 1999). By most accounts, new teachers need three or four years to achieve competence and several more to reach



proficiency (Feiman-Nemser, 2003). Yet only fifteen states require and finance mentoring for new teachers (Educational Testing Service, 2006).

In a study of principals, most report that their schools provide some orientation and mentoring for new, initially licensed teachers; however, several schools are dropping induction and mentoring programs due to budget constraints (Oregon University, 2000). "What novice teachers desire most are conditions that promote collegiality, continuous learning, and support..." (Hurwitz & Hurwitz, 2005). The extent to which beginning teachers are successful in their classrooms is greatly influenced by the environments in which they work including the amount of support they receive from others (Stockard & Lehman, 2004).

New teachers are most concerned about "survival." "Often, they [new teachers] feel overwhelmed and unable to translate what they learned in their preparation program to what they are expected to do on the job" (National Association of State Boards of Education, 2000, p. 10). Supported transition and on the job support is critical (Educational Testing Service, 2006).

Mentoring is the key if the profession, as a whole, wants new teachers to have the skills to enhance student achievement and, equally importantly, to stay within the business (Feiman-Nemser, 2003). "An array of policy incentives is needed to ensure that the continuum of teacher preparation, induction, and development will better assure teachers' initial success and long-term commitment to the profession" (ECS, n. d. a).

"Preservice teacher education does not, and possibly cannot, prepare individuals for all the new challenges they will encounter in their teaching" (Dias & Hassard, 2001, p. 1). The development of partnerships between colleges and local school districts that

provide new teachers with continuing assistance and mentoring following graduation would significantly enhance the success and survival of teacher education graduates (ACE, 1999).

New teachers need the opportunity to succeed. “Too many teachers are being thrust into classrooms with minimal practical teaching knowledge or even actual teaching experience” (New Teacher Center, 2006, p. 69). Beginning teachers must receive help in meeting practical classroom challenges long into their new career. The most effective mentoring programs offer ongoing support and involve partnerships between colleges and local school districts (Mendel, 2006; New Teacher Center, 2006). “A seamless process of professional learning that begins in preservice education, continues through the early years of induction, and extends through the years of developing accomplished practice is needed” (Darling-Hammond, 1998, p. 9).

Colleges and universities are being increasingly held accountable to ensure continuing professional growth for teachers during a student’s college years and early career. This is best accomplished through well-designed induction programs (ACE, 1999). Successful induction programs are not add-ons but are integrated into the professional practice of the school. They are conducted by a cadre of experienced personnel from collegiate faculty to teacher colleagues (Hurwitz & Hurwitz, 2005).

“A variation on induction programs for all new teachers are warranties or quality assurance guarantees” (Earley, 2000, p. 1). Mentoring and induction programs are currently being seen by many as not only a proactive but also a productive cog in the teacher preparation wheel (Stockard & Lehman, 2004). As a result, many colleges and



universities, under pressure to “guarantee” the quality of their teacher education graduates, have looked to mentoring as a way to fulfill this “warranty” obligation.

### *Teacher Guarantees and Warranties*

Provisions of *The No Child Left Behind Act of 2001* are stimulating a cultural change, a shift toward achievement and accountability. Teacher preparation programs are beginning to be measured by the ability of their graduates to help students achieve (USDOE, 2005a). Policymakers and the public expect assurances that students exiting teacher preparation programs are fully prepared for their teaching assignments (Earley, 2000). Systems must be built to ensure that new teachers, upon graduation, meet high standards (National Association of State Boards of Education, 2000).

Teacher education graduates in Georgia and Kentucky, along with those from individual institutions in twenty other states, come with institutional warranties assuring their quality (ECS, n. d. b). Guarantees are not new to the field. They were first proposed in the 1980s by several prominent education organizations as well some members of Congress (Earley, 2000). The Curry School of Education at the University of Virginia was the first to initiate a teacher warranty program in 1985 (Rakes, Gullledge & Rakes, 2005). Today 25 states as well as the District of Columbia and Puerto Rico direct or encourage quality assurance guarantees and over seventy-three public and private institutions of higher learning mandate them (Earley, 2000).

In 1990, NCATE, in its guidelines for accrediting teacher education programs, recommended that the unit responsible for the preparation of teachers develop arrangements with school districts to provide assistance to graduates who are first year teachers (NCATE, n. d. a). Warranties are one way that teacher preparation programs



can provide follow-up support to their graduates as well as assure the quality of graduates to employers and the general public (Duke, 1994).

Teacher warranties imply that institutions of higher learning are accountable for the effectiveness of their teacher graduates in the classroom. Overall, guarantees are designed to provide individualized programs of assistance to beginning teachers who perform unsatisfactorily (Duke, 1994). Today's warranties or quality assurance programs are generally agreements between the teacher education institution and the employing school district that obligate the college or university to provide additional course work, counseling, remediation, assistance, or other forms of support for a new teacher who is not meeting school or district standards (Early, 2000). This support and remediation would occur at no cost to the local district or the individual teacher.

Currently, no significant research base from which to ascertain whether or not these warranties have had an impact on enhanced teacher effectiveness exists (ECS, n. d. b). A review of the literature examining teacher guarantees and warranties indicates that requests for assistance have been minimal. Generally, requests have been less than 1% of graduates and when these requests occur, it is for assistance with classroom organization or management skills, rarely for content-related issues (Duke, 1994; Early, 2000; Rakes, Gullledge, & Rakes, 2005).

Rakes, Gullledge, and Rakes (2005) write:

A teacher warranty program of any type will not by itself bring about better prepared teachers. Perhaps one of the greatest values of a teacher warranty program is the concern and attention such a program may bring to those involved in preparation programs. A warranty may be viewed as a means of reflecting confidence in program completers and as an incentive to ensure quality instructional and clinical practices (p. 7).

In an effort to enhance education, and more specifically, the field of teaching, “some states and university systems have established quality assurance guarantees or warranties as part of more extensive P-16 education reform efforts” (Earley, 2000, p. 1). Combined resources make guarantees more easily implemented and readily available.

### *P-16 Initiatives*

Reform reports in the 1980s began to advocate the creation of partnerships between universities and the public schools as a means to improve teacher preparation (Ginsberg & Rhodes, 2003). Building a coordinated, standards-based, and accountable system of teacher preparation requires collaboration on many fronts: between higher education institutions and P-12 schools; within and among higher education institutions; and lastly among all partners--preparation programs, the states, districts, and schools that hire beginning teachers (National Association of State Boards of Education, 2000).

Georgia and Maryland are generally regarded as having the oldest and most developed P-16 partnerships, although many states have implemented them in recent years (Schmidt, 2006). “Rebuilding university-school partnerships is an essential strategy for reform in teacher education and the public schools” (ECS, n. d. a, p. 3). Achieving the educational goals of the 21<sup>st</sup> century will require policymakers and educators to view education as an integrated system, from birth through adulthood. A recent report from the State Higher Education Executive Officers (2003) sums it up well:

Each of the individual elements of the educational system must be excellent in its own right, and importantly, each of them must work effectively with the others toward the system's goal -- the highest possible levels of student learning through postsecondary education, and the capacity to continue learning successfully throughout life (p. 4).



The goal of P-16 initiatives nationwide is the co-reform of pre-service and in-service teacher learning with standards-based reform and educational renewal at the center (ECS, 2004; West Georgia P-16, 2006). There is a growing realization of the need for public schools and higher education to work more closely (Coble & Piscatelli, 2002). The focus is to align systems so students can move seamlessly from one level to the next, preschool through college with standards, assessments, and curricula that are aligned (ECS, 2004). An additional goal of these initiatives is the enhancement of education faculty preparing the nation's new teachers. If improvement in teacher preparation is to occur, "it is imperative to promote increased involvement in public schools by higher education faculty, both teaching and arts and sciences..." (ECS, n. d. a, p. 3).

"Collaboration through partnerships toward the common goal of improving teacher quality shows promise as an effective approach to creating lasting change in teacher preparation programs" (USDOE, 2005a, p. 6). School-university partnerships are seen as roads to collaboration, commitment, and change. Simultaneous renewal of P-12 schools and teacher preparation programs, with student learning as the focus, is the key to improve education at all levels (Goodlad, 1991; Louisiana Board of Regents, 2003).

The premise behind any P-16 initiative must be an equal partnership which works toward a mutually beneficial relationship (Sandholtz, 1999). These partnerships must function holistically and with a "common vision and purpose, otherwise a mismatch occurs and ongoing reform is not possible" (Valli & Cooper, 1999, pp. 57-58). Those that focus on high-quality professional development, which enhances curriculum, instruction, assessment and culture at both institutions are seen as the most successful (Loving, Wiseman, & Shumate, 1999). Promising as they seem to be, recent reports from



the National Center for Public Policy and Higher Education and the Stanford Institute for Higher Education Research concluded that “even after a decade, state-level P-16 reform is still in its very infancy” (Schmidt, 2006, p. 4). Nevertheless, several prominent groups and organizations such as the National Council for Accreditation of Teacher Education (NCATE), the American Association of Colleges for Teacher Education (AACTE), State Higher Education Executive Officers (SHEEO), and the National Network for Educational Renewal (NNER) continue to push hard for the development of partnerships between institutions of higher learning and local school districts.

#### Summary

“To reform the ways of teacher preparation is a complex task that involves fundamental change...it is for many...the heart of improving schools and preparing students of all levels for the challenges and opportunities that await them” (Northwest Regional Educational Laboratory, 1997, p. 8). According to Cochran-Smith (2001), “at this critical juncture...if we do not take control of framing the outcomes in teacher education, then the outcomes will surely frame us...” (§ 132).

Relevant research data are needed as teacher preparation programs seek to revise their curriculum to better meet the needs of the 21<sup>st</sup> century learner. This study focuses on school leader and teacher educator perceptions of how well proposed teacher education reform recommendations might help to produce high quality teachers capable of raising student achievement. “In the last analysis, civilization itself will be measured by the way in which children live and by what chance they have in the world” (Maggio, 1997, p. 8).

The following chapter presents a description of the methodology used to conduct this study. It includes a description of the research population, the development of the survey instrument, methods used for data collection, and a description of the data analysis processes.

## CHAPTER III

### METHODOLOGY

This chapter presents a description of the methodology used to conduct this study, including its design, the research population, and an instrument for data collection. It also provides a description of the method of data collection as well as the data analysis processes.

#### Purpose of the Study

The purpose of this study was to obtain and examine the perceptions of school leaders and teacher educators concerning reform recommendations for improving teacher preparation programs and their proposed ability to enhance the effectiveness of the classroom teacher. A quantitative research design was used in this study. In addition, specific survey data were analyzed qualitatively.

#### Research Questions

The following research questions were used to guide the study:

1. What are the perceptions of teacher educators and school leaders regarding proposed teacher preparation reform recommendations and their ability to enhance the quality of the teacher in the classroom?
2. What are the differences in perceptions of teacher educators and school leaders regarding proposed reform recommendations to enhance the quality of the teacher in the classroom?



3. What are the differences in perceptions of elementary and secondary school leaders regarding proposed reform recommendations to enhance the quality of the teacher in the classroom?
4. What are the differences in perceptions of teacher educators preparing teachers for secondary education and those preparing elementary teachers regarding proposed reform recommendations to enhance the quality of the teacher in the classroom?
5. What are the differences in perceptions in respondents across the three states?
6. What are the differences in perceptions of teacher educators across teacher education program size?
7. What are the differences in perceptions of school leaders across public school size?
8. What are the perceptions of teacher educators and school leaders regarding teacher guarantees?
9. Is there a difference between teacher educator and school leader perceptions of teacher guarantees?
10. What three recommendations do teacher educators and school leaders report would have the most impact on enhancing the quality of the teacher in the classroom?
11. Are there differences in the three recommendations teacher educators and school leaders perceive would have the most impact on enhancing the quality of the teacher in the classroom?

12. What additional recommendations do school leaders and teacher educators have to enhance teacher education?

In addition, the study invited additional comment from teacher educators and school leaders regarding their personal thoughts and perceptions on needed reforms in teacher preparation.

### Research Population

All elementary and secondary school principals or lead school administrators with posted e-mail addresses from the three northern border states of North Dakota, Minnesota, and Montana were invited to participate in this study. The decision to include lead administrators from each elementary and secondary school throughout the region was made following a pilot study comment that several schools would go unrepresented if just principals were chosen for inclusion. Many rural and small schools do not have a principal but instead have a combination principal/superintendent, head teacher, dean of students, or other form of lead administrator.

School principal/administrator e-mail addresses were obtained electronically from (a) the Department of Public Instruction in North Dakota, (b) the Department of Education in Minnesota, and (c) a publication of school administrators published by the Office of Public Instruction in Montana. The total number of school leaders invited to participate in the study was 1,723.

In addition, all teacher education faculty from 19 public institutions with traditional teacher preparation programs in Minnesota, Montana, and North Dakota who had posted e-mail addresses were included in the study. This encompassed faculty from 8 institutions of higher education in Minnesota, six in North Dakota, and five in Montana.

E-mail addresses for the faculty members were obtained electronically from each institution's website with the exception of one institution, which required the addresses be obtained through a phone conversation. The total number of teacher education faculty included in the study was 349. A total number of 2,072 surveys were sent to obtain data from the 3 state area.

### Development of the Survey Instrument

A review of the literature found no existing survey instrument, which addressed all of the current teacher education reform recommendations. As a result, the researcher developed the instrument used to survey the participants in the following manner.

Forty-six recommendations identified in the various reform reports as having potential for improving teacher preparation were analyzed by the researcher, categorized into themes, and analyzed for duplicity. Duplicate recommendations were combined into general statements by theme. One recommendation reflecting each theme was chosen for inclusion in the survey instrument. Table 2 presents a summary of the reform recommendations included in the survey along with the report(s) in which the recommendation appeared.

Initially, the doctoral committee reviewed the instrument. In May, it was revised from its original form based on comment from the committee. At that time, questions were combined and re-worded for clarity. The survey instrument was then field tested in mid-June with a group of school administrators enrolled in a doctoral program at the University of North Dakota, as well as with a group of education professors from a South Dakota university and a private college in Montana. A cover letter and the survey were emailed to 16 school administrators and ten teacher education faculty members asking



Table 2. Teacher Education Reform Recommendation Summary

Recommendation	NCTAF	USDOE	SHEEO	ACE	AFT	NAB	Carnegie	AASCU
Accreditation for all Schools of Education	X					X		
Close inadequate Schools of Education—those whose graduates do not pass licensure exams	X							
License teachers based on demonstrated performance in subject matter, teaching knowledge, and teaching skill	X					X		
Organize teacher education around K12 student standards and curricular standards	X				X			
Develop extended graduate-level teacher preparation programs	X			X	X			
Establish a required year-long internship for teacher candidates	X				X			
Make teacher education a university-wide priority		X	X	X				X
Develop strong links between teacher education programs and local school districts through joint councils or partnerships		X	X				X	X
Develop accountability standards for high-quality teacher education		X					X	
Promote the use of shared resources and staff between universities and local school districts			X					
Promote program integration/coordination between Colleges of Arts & Sciences and Schools of Education to enhance teacher education			X	X			X	
Use public policy as a vehicle to enhance teacher education			X					
Conduct ongoing campus-wide reviews of teacher education programs				X				
Commission periodic independent appraisals of teacher education programs				X				
Ensure that teacher education programs have the necessary resources to help teacher candidates become proficient with technology				X				X
Strengthen inter-institutional transfer and recruitment for teacher education				X				
Universities should ensure that graduates of teacher education programs are supported, monitored, and mentored				X			X	X
University Presidents should be active in shaping public policy regarding teacher education				X				

Table 2 con..

Recommendation	NCTAF	USDOE	SHEEO	ACE	AFT	NAB	Carnegie	AASCU
Require teacher candidates to take a core of liberal arts courses in order to gain a solid foundation in subject matter					X			
Institute higher entry criteria for admission to teacher education programs to 3.0 at end of sophomore year					X	X		
Institute a national entry test for admission into teacher education which ensures college-level proficiency in math, science, English, and the humanities					X			
Require teacher candidates to have an academic major in the subject they will teach					X	X		
Require a core curricula in pedagogy based on the latest research on student- learning and content-specific teaching methods for teacher candidates					X			
Require an exit licensure test for teacher candidates					X			
Provide extensive "clinical" practice for teacher candidates					X	X		X

*Note.* The following abbreviations are used in this table. NCTAF is the National Commission for Teaching and America's Future. USDOE is the United States Department of Education. SHEEO is State Higher Education Executive Officers. ACE is the American Council on Education. AFT is the American Federation of Teachers. NAB is the National Alliance of Business. Carnegie is the Carnegie Corporation of New York. AASCU is the American Association of State Colleges and Universities.

them to complete the survey and to provide comment on its questions. Ten days later, a follow-up e-mail was sent to non-respondents. Eight of the 16 school administrators returned the survey with comment for a return rate of 50%. Four of the ten faculty members returned survey comments for a return rate of 40%. Phone interviews were held with three respondents to clarify their recommendations for revision.

Comments from the field study were analyzed and the survey revised based upon this input. Revisions occurred to clarify the survey questions as well as to simplify the directions.



Twenty-five recommendations were ultimately chosen for inclusion in the 33 question survey. These items were entered into a self-reporting questionnaire in the electronic research tool SurveyMonkey (2006), for separate electronic distribution to school leaders and teacher educators throughout the region. The survey was divided into two sections: the first asked for demographic data and the second asked for substantive data related to the proposed teacher education reforms.

Participants were asked to rate their perceptions of 25 proposed reform recommendations on a Likert scale of 1-4 with 1 representing the choice “not at all”; 2, “somewhat”; 3, “very ” and; 4, “extremely”. An opportunity for neutrality was not allowed within the scale.

In addition, participants were asked to indicate their perception of the appropriateness of “teacher guarantees” by responding to a “yes/no” question and by providing comment as desired. Next, the participants were asked to identify three reform recommendations they felt would have the most impact in enhancing the preparation of teachers. Finally, participants were asked to respond to an open-ended question asking for any other reform measures they would suggest that would enhance the field of teacher education.

Identical survey instruments were distributed to both school leaders and teacher educators. A copy of the final survey instrument and informed consent can be found in Appendix A.

### Survey Administration and Data Collection

The researcher received approval for this study from the Institutional Review Board of the University of North Dakota on May 8, 2006. The Internet based research



tool, SurveyMonkey (2006) was used to deliver the survey to targeted participants via electronic mail. Each school administrator and teacher educator was sent an email explaining the research project and inviting him or her to participate in the study during the third week of August, 2006. This e-mail contained a link to the online survey which began with informed consent and included instructions for returning the survey when complete. A total number of 2,072 surveys were sent to obtain data from the three state area. The minimum target response rate was 10%. As of September 3, 2006, 214 responses were returned for an initial response rate of 10.3%. In an effort to encourage more participants to respond, a second email was sent to non-respondents on September 3<sup>rd</sup> asking them to complete the survey. The survey closed September 10, 2006. At that point, analysis of the data commenced.

#### Data Analysis

First, demographic data collected on the survey was analyzed for frequency and percentage of response. Of 2,072 possible respondents, 265 total faculty members and school leaders responded for an overall response rate of 12.8%. Of those 265 respondents, 31 were eliminated from the analysis due to incomplete responses. In the end 234 respondent's surveys were analyzed for an overall percentage rate of 11.3%. The total number of respondents included 62 faculty members and 172 school leaders. Faculty response rate was 17.8%. School leader response rate was 10.0%.

Next, data were analyzed individually for each survey question. Research questions 1-7 were answered with the responses to the 25 teacher reform recommendations. Means and standard deviations were calculated from the Likert-scale

responses. The *t*-test and a 2-way MANOVA were used to determine differences between groups.

Research questions 8 and 9 were addressed with survey responses to question 32. These were reported in a yes/no format, regarding the appropriateness of teacher guarantees, and are reported as frequencies and percentages for the various demographic groups. Differences between group responses are reported using Chi-square.

Finally, research questions 10 through 12 were addressed in the last section of the survey. Two open-ended questions soliciting opinions concerning preferences of reform recommendations, and asking for additional comment were used to gather this data. All information provided by respondents on survey questions 33 and 34 was described within the findings, grouped, and analyzed for trends using the constant comparative method, a recognized qualitative data analysis methodology (Maykut & Morehouse, 1994).

The *Statistical Package for the Social Sciences (SPSS)*, a commercial computerized statistical package, was used to analyze the data (SPSS, Inc., 2006). In addition, the researcher used the services of the Bureau of Educational Statistics and Applied Research (BESAR) at the College of Education and Human Development at the University of North Dakota for data compilation and analysis. Chapter IV describes the details of the data analysis and presents the results of this study.

## CHAPTER IV

### RESULTS

This chapter reports on the data collected from a survey instrument completed by school leaders and teacher education faculty at public schools and colleges of teacher education across Minnesota, North Dakota, and Montana. The purpose of this study was to obtain the perceptions of school leaders and teacher educators regarding various recommendations for reform of teacher preparation, which have been proposed by various groups and organizations. Specifically respondents were asked to indicate their perceptions of the ability of 25 proposed reform recommendations to enhance the quality of the teacher in the classroom. In addition, respondents were asked to indicate their feelings regarding teacher guarantees.

Findings are reported in three major sections within this chapter. Demographic information is presented first followed by the analysis of quantitative data pertaining to the research questions. Analysis of the qualitative data pertaining to the final research questions ends this chapter.

#### Demographic Information

A total of 2,072 surveys were e-mailed to potential respondents within the three state area. The total number of respondents with data that was useable included 62 faculty members and 172 school leaders. The overall response rate was 11.3%. Faculty response rate was 17.8%. School leader response rate was 10.0%.



The sample included 72 secondary principals (30.8%), 83 elementary principals (35.5%), and 17 other school administrators (7.3%). In addition, 21 elementary teacher educators (9.0%), 19 secondary teacher educators (8.1%), and 22 other faculty (9.4%) were included within the sample. The frequency and percentages of the respondents is illustrated in Table 3.

Table 3. Frequency and Percentage of Respondents According to Position

Position	N	%
Secondary Principal	72	30.8
Elementary Principal	83	35.5
Other School Administrator	17	7.3
Teacher Educator—Elementary	21	9.0
Teacher Educator—Secondary	19	8.1
Other Faculty	22	9.4

Respondents were also asked to provide a state in which they were employed. Eighty-five respondents reported working in the state of Minnesota (36.3%), 100 in the state of North Dakota (42.7%), and 49 in the state of Montana (20.9%). The frequency and percentage of respondents according to State of employment is presented in Table 4.

School leaders were asked to provide specific information regarding the student population within the school they lead. Sixty-eight school leaders did not provide data that could be used in this analysis. Table 5 shows the school leader respondents enrollment data.

Table 4. Frequency and Percentage of Respondents According to State

State	N	%
Minnesota	85	36.3
North Dakota	100	42.7
Montana	49	20.9

Table 5. Frequency and Percentages of School Leader Respondents According to K-12 Enrollment

Number of Students (K-12)	N	%
1-100	26	15.7
101-300	50	30.1
301-500	37	22.2
501+	53	32.0

Teacher education faculties were asked to report the enrollment within their teacher education program. Fifty-two respondents provided these data. Table 6 provides frequencies and percentages relating to this enrollment.

### The Research Questions

The research questions are addressed in this section in the order in which they are presented in Chapter I. Those addressed through quantitative data analysis are presented first. Those addressed through qualitative data are presented later in the chapter.

Table 6. Frequency and Percentage of Teacher Educator Respondents According to Teacher Education Program Enrollment

Number of Students	N	%
1-200	13	25.0
201-400	11	21.1
401-600	9	17.3
600+	19	37.0

### *Question One*

Research Question 1: What are the perceptions of teacher educators and school leaders regarding proposed teacher preparation reform recommendations and their ability to enhance the quality of the teacher in the classroom?

Survey participants were asked to indicate the degree to which they believed the proposed teacher education reform recommendations would increase the ability of the classroom teacher to enhance student achievement. Responses to survey items germane to this research question were gauged by teacher educator and school leader responses to each of the reform recommendations on a Likert four-point scale where 4 equals “extremely” and 1 equals “not at all.” The mean response and standard deviations for each teacher education reform recommendation for both school leaders and teacher education faculty were calculated and are presented in Table 7.

Analysis of the means for research question one indicated that school leaders found five of the proposed recommendations “very important” in enhancing the field of



Table 7. Means and Standard Deviations for Respondents According to Reform Recommendation

Recommendation	School Leaders (n=172)		Teacher Educators (n=62)	
	M	SD	M	SD
Require Accreditation for all Teacher Education Programs	2.55	.83	2.74	.90
Close inadequate schools of education--those who have less than 90% graduate passage rate on licensure exams	2.05	.82	1.77	.76
Graduates Licensed Based Upon Demonstrated Performance in Subject Matter and Teaching Knowledge	2.84	.80	2.95	.78
Organize Teacher Education Around K-12 Standards	3.09	.73	2.69	.92
Develop Extended Graduate Level Teacher Education as the Norm	2.31	.86	2.23	.89
Require Year-Long Internship	2.46	1.02	2.68	.84
Establish Teacher Preparation as a University Wide Priority	2.73	.81	3.27	.81
Develop Strong Links Between Teacher Education Programs and Local School Districts	3.20	.80	3.26	.77
Require Accountability Standards for Teacher Preparation Similar to Those Mandated by NCLB	2.68	.89	2.23	1.05
Promote the Use of Shared Resources and Staff Between Teacher Education and Local School Districts	2.98	.78	2.79	.81

Table 7 cont.

Recommendation	School Leaders (n=172)		Teacher Educators (n=62)	
	M	SD	M	SD
Require Program Integration Between Colleges of Arts and Sciences and Teacher Education Programs	2.85	.80	2.98	.88
Utilize Public Policy to Enhance Teacher Education	2.36	.90	2.13	.86
Require Regular Campus-Wide Reviews of Teacher Education Programs	2.77	.85	2.27	.94
Commission Periodic Independent Appraisals of Teacher Education Programs by Outside Agencies	2.51	.85	2.19	.94
Ensure that Teacher Education Programs Have the Necessary Resources to Enhance Technology Proficiency of Candidates	3.23	.77	3.21	.87
Strengthen Inter-Institutional Transfer and Recruitment to Increase the Number of Candidates Entering the Field	2.74	.82	2.52	.88
Require that Teacher Preparation Programs Support and Mentor Graduates as They Enter the Field	3.21	.74	3.03	.81
Teacher Education Faculty/University Presidents Work Together to Take the Lead in Shaping Public Policy Surrounding Teacher Education	2.65	.82	3.00	.83
Mandate a Core of Liberal Arts Courses to Gain a Solid Foundation in Subject Matter	2.63	.80	3.10	.82
Institute a Higher GPA for Admission Into Teacher Education	2.40	.84	2.60	.90

Table 7 cont.

Recommendation	School Leaders (n=172)		Teacher Educators (n=62)	
	M	SD	M	SD
Develop a National Entry Test for Admission Into Teacher Education	2.32	.85	2.08	1.03
Require an Academic Major	2.70	.86	2.76	.97
Institute a Common Rigorous Exit/Licensure Test	2.27	.87	2.29	1.00
Require a Core in Pedagogy Based on Latest Research on Student Learning	3.06	.82	3.35	.77
Mandate Extensive Clinical Practice Similar to a "Teaching Hospital"	2.75	.89	3.05	.10

teacher education. "Very important" indicates that the mean response fell between 3.0 and 3.9.

First, the proposed recommendation by the American Council on Education (1999) and the American Association of State Colleges and Universities (2004), to ensure that teacher education programs have the necessary resources and support to assist teacher candidates in becoming proficient with technology was seen as most important by K-12 school leaders to enhance the field of teacher education ( $M = 3.23$ ). Next school administrators determined as "very important," the recommendation, put forth by several of the reviewed reform reports, to develop strong links between teacher education programs and local school districts through joint councils and partnerships ( $M = 3.20$ ).



Those same leaders perceived that the proposed recommendation by the American Federation of Teachers (2000) to require core curricula in pedagogy for teacher candidates based on the latest research on student learning would ultimately enhance the field of teacher education and increase the ability of the classroom teacher to raise student achievement ( $M = 3.06$ ).

School leaders also perceived two additional proposed recommendations as “very important.” The American Council on Education’s proposal to require teacher preparation programs to ensure that their graduates are supported, monitored, and mentored as they enter the field was perceived as “very important” in enhancing teacher preparation ( $M = 3.21$ ). Lastly, school leaders rated the proposed recommendation by the American Federation of Teachers (2000) to organize teacher education around standards for K-12 student achievement as well as K-12 curriculum as “very important” for enhancing the field of teacher education ( $M = 3.09$ ).

Analysis of the means for teacher educator responses rated eight of the proposed recommendations as “very important” in enhancing the field of teacher preparation. Teacher educators, as a group, agreed with school leaders that the development of strong links between teacher education programs and local school districts was “very important” ( $M = 3.26$ ). In addition they concurred on the requirement for teacher education programs to ensure that their graduates are supported, monitored, and mentored as they enter the field ( $M = 3.05$ ) as well as on the importance having adequate support and resources to assist teacher candidates in becoming proficient with technology ( $M = 3.21$ ). Finally, teacher educators and school leaders agreed on the proposed recommendation by the American Federation of Teachers (2000) to require core curricula in pedagogy for

teacher candidates that is based on the latest research on student learning as “very important” in enhancing the field of teacher preparation ( $M = 3.35$ ).

Teacher educators, as a group, also rated as “very important” the proposed recommendation, articulated in several of the reform reports, to establish the preparation of teachers as a university-wide priority with expected financial support from the institution’s president and high-level officials ( $M = 3.27$ ). The need to work with university presidents to take an active role in shaping public policy, a proposal by the American Council on Education (1999) as well as the State Higher Education Executive Officers (1999) was also perceived as “very important” by teacher educators to enhance the field of teacher preparation ( $M = 3.00$ ). In addition, university faculty working in the field of teacher education perceived it as “very important” to mandate that teacher candidates take a core of liberal arts courses in order to gain a solid foundation in the subject matter that they will teach, a recommendation put forth by the American Federation of Teachers in 2000 ( $M = 3.10$ ). Lastly, teacher educators perceived the proposed recommendation by the Carnegie Corporation (2001), the American Federation of Teachers (2000), and the American Association of State Colleges and Universities (2004) to mandate extensive “clinical” practice for teacher candidates similar to that given prospective medical practitioners as “very important” in enhancing teacher education ( $M = 3.05$ ). The low standard deviation of this mean ( $SD = .10$ ) appears to indicate strong agreement among teacher educators on this reform recommendation.

Analysis of the lowest means for each group revealed, teacher educators, as a whole, did not put much importance in the proposed recommendation by the National



Center for Teaching and America's Future (1996) to close all teacher education programs that do not have a 90% graduate pass rate on state licensure exams ( $M = 1.77$ ).

School leaders, as a group, did not view any proposed recommendation as "not important at all". All reform recommendations were rated at least 2.00 or perceived on the average to be at least "somewhat" important in the reformation of teacher education.

### *Question Two*

Research Question 2: What are the differences in perceptions of teacher educators and school leaders regarding proposed reform recommendations to enhance the quality of the teacher in the classroom?

A *t*-test was used to compare the means of two samples for statistical significance between the means of teacher educator and school leader responses. Significance was set at the .05 level.

In interpreting which differences between the means were statistically significant, an independent *t*-test was conducted where the probability was set at  $<.05$  level. Significant differences between teacher educator and school leader perceptions were found on 10 of the 25 proposed reform recommendations. Table 8 presents the significant results of these *t*-tests. Full results are presented in Table A in Appendix C.

The first significant difference between the two groups of respondents was found on the recommendation by the National Center for Teaching and America's Future (1996) to close all teacher education programs that do not have a 90% graduate pass rate on state licensure exams. Though both groups did not put much emphasis on its importance, school leaders rated it as "somewhat important" ( $M = 2.04$ ) while teacher educators perceived "no importance at all" ( $M = 1.77$ ) in this proposed recommendation.



Table 8. Significant Means and *t*-test Results for Teacher Educators and School Leaders on Proposed Reform Recommendations

Recommendation	School Leader (n=172)		Teacher Ed. (n=62)		<i>t</i>	<i>p</i>
	M	SD	M	SD		
Close inadequate schools of education--those who have less than 90% graduate passage rate on licensure exams	2.05	.82	1.77	.76	2.30	.02*
Organize Teacher Education Around K-12 Standards	3.09	.73	2.70	.92	3.39	< .01*
Establish Teacher Prep as a University Wide Priority	2.73	.81	3.27	.81	-4.56	.00*
Require Accountability Standards for Teacher Prep Similar to Those Mandated by NCLB	2.68	.89	2.23	1.05	3.29	< .01*
Require Regular Campus-Wide Reviews of Teacher Ed Programs	2.77	.85	2.27	.94	3.79	.00*
Commission Periodic Independent Appraisals of Teacher Ed Programs by Outside Agencies	2.51	.85	2.19	.94	2.46	.02*
Teacher Ed Faculty and Univ. Presidents Work Together to Take the Lead in Shaping Public Policy Surrounding Teacher Ed	2.65	.82	3.00	.83	-2.86	.01*
Mandate a Core of Liberal Arts Courses to Gain Solid Foundation in Subject Matter	2.63	.80	3.10	.82	-3.87	.00*

A second difference was noted for the proposed recommendation to organize teacher education around standards for K-12 student achievement as well as K-12 curriculum. School leaders perceived this recommendation, by the American Federation of Teachers (2000) and the National Center for Teaching and America's Future (1996), as "very important" in enhancing teacher education and, as a result, the quality of the teacher in the classroom ( $M = 3.09$ ). Teacher educators perceived it as only "somewhat important" for enhancing the preparation of teachers ( $M = 2.70$ ).

Another significant difference was found on the recommendation by several of the reports to establish the preparation of teachers as a university-wide priority with expected financial support from the institution's president and high-level officials. As expected, teacher educators perceived this as "very important" ( $M = 3.27$ ) while school leaders observed it as only "somewhat" important ( $M = 2.72$ ).

Requiring accountability standards for high-quality teacher preparation similar to those mandated in K-12, as first proposed by the National Council for Teaching and America's Future (1996) was another area of significant difference between the two groups. While both perceived this as only "somewhat important," school leaders ( $M = 2.68$ ) rated it more highly than did teacher educators ( $M = 2.23$ ).

The American Council on Education's (1999) proposed requirement of campus-wide reviews of teacher education programs on a regularly scheduled basis was another recommendation where significant differences were noted. Although both groups perceived this recommendation as only "somewhat important" overall, school leaders ( $M = 2.77$ ) rated it higher than teacher educators ( $M = 2.27$ ).

Similarly, the two groups of respondents perceived the recommendation by the American Council on Education (1999) to commission periodic appraisals of teacher education programs by outside agencies differently. Again, though only seen as "somewhat important" by both groups, school leaders ( $M = 2.51$ ) rated it higher than teacher educators ( $M = 2.19$ ).

Significant differences between the two groups were also found on the proposed recommendation by the American Council on Education (1999) and the State Higher Education Executive Officers (1999) for teacher education faculty to work with



university presidents on shaping public policy. Teacher educators perceived this recommendation to be "very important" in enhancing the field of teacher education ( $M = 3.00$ ) while school leaders distinguished it as only "somewhat important" ( $M = 2.65$ ).

Again, a significant difference was determined between the two groups for the proposed recommendation by the American Federation of Teachers (2000) for mandating teacher candidates to take a core of liberal arts courses in order to gain a solid foundation in the subject matter they will teach. Teacher educators rated this as "very important" ( $M = 3.10$ ). School leaders perceived this recommendation to be only "somewhat important" in enhancing the field of teacher education ( $M = 2.63$ ).

Teacher educators and school leaders, while both indicating the need to require core curricula in pedagogy for teacher candidates based on the latest research in student learning as very important, differed significantly in the degree to which they perceived this recommendation. Teacher educators ( $M = 3.35$ ) determine it to be more important than school leaders ( $M = 3.06$ ) for enhancing the field of teacher preparation.

Lastly, teacher educators and school leaders differed on their perception of the need, expressed by the Carnegie Corporation (2001) and other reform reports, to mandate extensive "clinical" practice for teacher candidates similar to that given prospective medical practitioners. Teacher educators rated the need to establish schools of education as "teaching hospitals" more strongly than did school leaders. Teacher educators perceived this recommendation to be "very important" ( $M = 3.05$ ) in enhancing the field of teacher preparation while school leaders rated it as only "somewhat important" ( $M = 2.75$ ).



It is important to note that school leaders and teacher educators agreed more often than not on the perceived importance of the proposed recommendations. Both groups rated the majority of recommendations as only "somewhat" important. Several of the recommendations were determined by both groups to be "very important" on the average. Those focused on building strong links between teacher education programs and local school districts, ensuring adequate funding to enhance technology proficiency, mentoring, and requiring a core in pedagogy based on the latest research on student learning.

### *Question Three*

Research Question 3: What are the differences in perceptions of elementary and secondary school leaders regarding proposed reform recommendations to enhance the quality of the teacher in the classroom?

This question was also answered using an independent *t*-test. Equality of the means was examined to find any significant differences between them for elementary and secondary school leaders.

In determining which differences between the means were statistically significant, the probability was set at  $<.05$  level. Significant differences between elementary and secondary school leader perceptions were found on only three of the twenty-five proposed recommendations. Table 9 presents the significant results for Question Three. Full results are presented in Table B in Appendix C.

A significant difference was found between elementary and secondary school leaders on the proposed recommendation concerning the organization of teacher

Table 9. Significant Means, Standard Deviations, *t*-test Results, and Probability for Elementary and Secondary School Leaders on Proposed Reform Recommendations

Recommendation	Elementary (n=83)		Secondary (n=72)		<i>t</i>	<i>p</i>
	M	SD	M	SD		
Organize Teacher Education Around K-12 Standards	3.22	.70	2.94	.75	-2.341	.021*
Require campus-wide reviews of teacher education programs	2.94	.82	2.63	.85	-2.353	.020*
Institute a Higher GPA for Admission Into Teacher Ed	2.57	.86	2.21	.79	-2.692	.008*

education around standards for K-12 student achievement as well as K-12 curriculum. Elementary school leaders perceived this recommendation to be “very important” in enhancing teacher education ( $M = 3.22$ ). Secondary school leaders perceived this recommendation by the American Federation of Teachers (2000) and the National Center for Teaching and America’s Future (1996) as only “somewhat important” ( $M = 2.94$ ).

Requiring campus-wide reviews of teacher education programs on a regularly scheduled basis, as proposed by the American Council on Education (1999) was another area of significant difference for school leaders. While both groups perceived this recommendation to be only “somewhat important,” elementary school leaders ( $M = 2.94$ ) perceived it as more important than did secondary school leaders ( $M = 2.63$ ).

The last significant difference between the two groups was seen on the recommendation to institute higher entry criteria for admission into teacher education programs, as proposed by the National Alliance of Business (2001) and the American Federation of Teachers (2000). As above, both groups perceived this recommendation as



being only “somewhat important.” Elementary leaders ( $M = 2.57$ ) rated it as more important than secondary school leaders ( $M = 2.21$ ).

#### *Question Four*

Research Question 4: What are the differences in perceptions of teacher educators preparing teachers for secondary education and those preparing elementary teachers regarding proposed reform recommendations to enhance the quality of the teacher in the classroom?

To answer this question, a 2-way multivariate analysis of variance or MANOVA was conducted to evaluate group differences between teacher educators on the dependent variables. Wilks' Lambda, the most commonly reported MANOVA statistic was used to determine significance. Results of the MANOVA revealed no significant differences among elementary and secondary teacher educators on the dependent variables (Wilks' Lambda = .226, sig. = .102) indicating a general consensus between all teacher educators on the perceived importance of the proposed teacher education reforms. Table C, in Appendix C, presents the results of the MANOVA.

#### *Question Five*

Research Question 5: What are the differences in perceptions in respondents across the three states? To answer this question a 2-way MANOVA was conducted to evaluate group differences on the combined dependent variables. In this case, the independent variables considered were state of employment for all respondents. The dependent variables were the proposed reform recommendations.

Wilks' Lambda, the most commonly reported MANOVA statistic, was used to determine significance. MANOVA results revealed significant differences among the



states on the dependent variables ( $F = 1.956, p < .001$ ). A host hoc test was conducted to determine which groups were significantly different within each dependent variable.

Table 10 illustrates the significant differences across states. Full results of the MANOVA are presented in Table D in Appendix C.

Respondents from North Dakota and Montana differed more often than any other group. The first significant difference between respondents from these two states occurred on the proposed recommendation, to commission periodic independent appraisals of teacher education programs by outside agencies. Respondents from both states perceived this recommendation, by the American Council on Education (1999), to be only "somewhat important" but those from Montana rated it higher ( $M = 2.59$ ) than those from North Dakota ( $M = 2.21$ ).

In addition, respondents from those two states differed as to their perceptions of the recommendations, by the American Federation of Teachers (2000) and the National Alliance of Business (2001), to institute higher entry criteria for admission into teacher education and in their perceptions of the importance of developing a national entry test for admission into the field. In both cases, respondents from Montana ( $M = 2.75$ ;  $M = 2.47$ ) perceived these proposed recommendations as more important than respondents from North Dakota ( $M = 2.37$ ;  $M = 2.09$ ).

Finally, respondents from North Dakota and Montana, as well as those from Minnesota and Montana, differed in their perceptions of the importance of strengthening inter-institutional transfer and recruitment to increase the number of candidates entering the field of teacher education as proposed by the American Council on Education (1999).

Table 10. Significant Means, *F* Values and Pairwise Difference Comparisons Between the States on Perceived Importance of Proposed Recommendations

Recommendation	MN <i>M</i> n= 85	ND <i>M</i> n=100	MT <i>M</i> n=49	<i>F</i>	<i>p</i>	MN/ND <i>p</i>	MN/MT <i>p</i>	ND/MT <i>p</i>
Graduates Licensed Based Upon Demonstrated Performance in Subject Matter and Teaching Knowledge	3.12	2.73	2.86	5.983	.003	.002*	.206	.912
Commission Periodic Independent Appraisals of Teacher Education Programs by Outside Agencies.	2.39	2.21	2.59	3.375	.036	.484	.551	.033*
Strengthen Inter-Institutional Transfer and Recruitment to Increase the Number of Candidate Entering the Field	2.53	2.57	2.94	4.501	.012	1.000	.015*	.029*
Require That Teacher Preparation Programs Support and Mentor Graduates as They Enter the Field	3.28	2.97	3.16	3.930	.021	.018*	1.000	.488
Institute a Higher GPA for Admission Into Teacher Education	2.51	2.37	2.75	3.294	.039	.806	.346	.033*
Develop a National Entry Test for Admission Into Teacher Education	2.18	2.09	2.47	3.090	.047	1.000	.216	.042*
Institute a Common Rigorous Exit/Licensure Test	2.45	2.08	2.41	4.814	.009	.013*	1.000	.089
Total Differences						3	1	4

While all perceived this recommendation to be only "somewhat important", respondents from Montana rated it most strongly ( $M = 2.94$ ), followed by North Dakota ( $M = 2.57$ ), and Minnesota ( $M = 2.53$ ).

Next, several differences were noted between respondents from Minnesota and North Dakota. School leaders from Minnesota perceived the recommendation, from the National Center for Teaching and America's Future (1996) and the National Alliance of Business (2001), to insist that graduates of teacher education programs are licensed based upon demonstrated performance in subject matter as well as teaching knowledge and skill, as "very important" ( $M = 3.12$ ) while those from North Dakota perceived it as only "somewhat important" ( $M = 2.73$ ).

In addition, respondents from these same two states differed as to their perceptions of the importance of instituting a common rigorous exit/licensure test for graduates of teacher education programs. While respondents from both states perceived this recommendation, put forth by the American Federation of Teachers (2000), to be only "somewhat important," Minnesota respondents rated it more so ( $M = 2.45$ ) than did those from North Dakota ( $M = 2.08$ ).

Finally, respondents from Minnesota and North Dakota also differed on their perceptions of the proposed recommendation by the Carnegie Corporation (2001) as well as several other reform reports, to require teacher preparation programs to ensure that their graduates are supported, monitored, and mentored as they enter the field. Again, respondents from Minnesota rated this higher ( $M = 3.28$ ) than their colleagues from North Dakota ( $M = 2.97$ ).

### *Question Six*

Research Question 6: What are the differences in perceptions of teacher educators across teacher education program size?



To answer this question, a 2-way multivariate analysis of variance or MANOVA was conducted to evaluate group differences on the combined dependent variables. In this case, the independent variables considered were the different sizes of teacher education programs. Again, the dependent variables considered were the proposed reform recommendations.

Wilks' Lambda, the most commonly reported MANOVA statistic, was used to determine significance. MANOVA results revealed no significant differences among teacher educators of varying program size on the dependent variables (Wilks' Lambda = .692,  $p = .942$ ). These results again indicated a general agreement on the perceived importance of the proposed reform recommendations among all teacher educators. Table E in Appendix C presents the results of the MANOVA.

#### *Question Seven*

Research Question 7: What are the differences in perceptions of school leaders across public school size?

To answer this question, a 2-way multivariate analysis of variance or MANOVA was conducted to evaluate group differences on the combined dependent variables. In this case, the independent variables considered were the varying public school student enrollment sizes. The dependent variables were again the proposed reform recommendations.

Wilks' Lambda, the most commonly reported MANOVA statistic was used to determine significance. MANOVA results revealed significant differences among some of the dependent variables ( $F=1.490$ ,  $p = .008$ ). As a result, a significant difference between K-12 respondents from different size schools was noted. In order to determine

which differences between the means were statistically significant, probability was set at  $<.05$  level. Table 11 illustrates the significant results. Full results for the MANOVA are reported in Table F in Appendix C.

Table 11. Significant Means, *F* Values, and Probability for School Leaders Across K-12 Enrollment Size

Recommendation	1-100 M	101-300 M	301-500 M	500+ M	<i>F</i>	<i>p</i>
	n=26	n=50	n=37	n=53		
Require Accreditation for All Teacher Education Programs	2.04	2.52	2.92	2.57	6.11	.001*
Close inadequate schools of education--those who have less than 90% graduate passage rate on licensure exams	1.65	1.96	2.27	2.17	3.71	.013*
Graduates Licensed Based Upon Demonstrated Performance in Subject Matter and Teaching Knowledge	2.35	2.74	3.03	3.06	6.02	.001*
Develop Extended Graduate Level Teacher Education as the Norm	1.96	2.40	2.57	2.21	3.20	.025*
Establish Teacher Preparation as a University Wide Priority	2.39	2.72	2.97	2.74	2.71	.047*
Develop Strong Links Between Teacher Education Programs and Local School Districts	2.85	3.14	3.35	3.32	2.69	.048*
Require Accountability Standards for Teacher Preparation Similar to Those Mandated by NCLB	2.35	2.56	3.05	2.70	3.86	.011*
Utilize Public Policy to Enhance Teacher Education	1.85	2.36	2.57	2.43	3.83	.011*
Commission Periodic Independent Appraisals of Teacher Education Programs by Outside Agencies	2.19	2.34	2.89	2.55	4.68	.004*
Teacher Education Faculty and University Presidents Work Together to Take the Lead in Shaping Public Policy Surrounding Teacher Education	2.31	2.58	2.92	2.66	3.08	.029*
Institute a Common Rigorous Exit/Licensure Test	1.62	2.14	2.51	2.59	10.05	.000*
Mandate Extensive Clinical Practice Similar to a "Teaching Hospital"	2.46	2.58	2.95	2.91	2.68	.049*



A post hoc test was conducted to determine which groups were significantly different within each dependent variable. Table 12 illustrates the significant differences across K-12 enrollment size. Full statistical results are reported in Table G in Appendix C.

Several significant differences exist between school leaders of the various school sizes. Most differences occurred between leaders of schools with 1-100 students and those of schools with 301-500 students. Eleven items with significant differences exist between these school leaders and in all cases the leaders of schools with 301-500 students perceive the proposed recommendations to be more important than do leaders of the smallest schools. Table 13 illustrates these differences.

Several significant differences were also noted between leaders of schools with student populations of 1-100 and 500+. Again, in all cases, leaders of the larger schools perceived the proposed recommendations as more important than the leaders of the smallest schools. Table 14 illustrates the differences.

Two differences were found between leaders of the smallest schools and leaders of school with student populations between 101-300. Again, leaders of the larger school perceived the proposed recommendations to be more important although the differences were not as great as above. Table 15 illustrates the differences.

School leaders with student populations of 101-300 differed from leaders of larger schools (301-500 and 500+) on a few of the proposed recommendations. As above, school leaders from the larger schools tended to rate the proposed recommendations as more important than leaders of the smaller schools. Table 16 illustrates the differences between groups.



Table 12. Significant Pairwise Comparison Between School Leaders of Varying K-12 Enrollment Size on Proposed Reform Recommendations

Recommendation	1-100 / 101-300	1-100 / 301-500	1-100 / 500+	101-300 / 301-500	101-300 / 500+	301-500 / 500+
Require Accreditation for All Teacher Education Programs	.09	.00*	.04*	.14	1.00	.26
Close Those Whose State Licensure Pass Rate is $\geq 10\%$	.68	.02*	.05*	.44	1.00	1.00
Graduates Licensed Based Upon Demonstrated Performance in Subject Matter and Teaching Knowledge	.21	.004*	.001*	.52	.23	1.00
Develop Extended Graduate Level Teacher Education as the Norm	.18	.03*	1.00	1.00	1.00	.26
Establish Teacher Preparation as a University Wide Priority	.53	.03*	.43	.90	1.00	1.00
Require Accountability Standards for Teacher Preparation Similar to Those Mandated by NCLB	1.00	.01*	.56	.06	1.00	.35
Utilize Public Policy to Enhance Teacher Education	.10	.01*	.03*	1.00	1.00	1.00
Commission Periodic Independent Appraisals of Teacher Education Programs by Outside Agencies.	1.00	.007*	.44	.01*	1.00	.32
Teacher Education Faculty and University Presidents Work Together to Take the Lead in Shaping Public Policy Surrounding Teacher Ed	.98	.02*	.41	.32	1.00	.81
Require an Academic Major	1.00	1.00	.94	1.00	.04*	.86
Institute a Common Rigorous Exit/Licensure Test	.045*	.00*	.00*	.20	.03*	1.00
Require Core Pedagogy Based on Latest Student Learning Research	.04*	.00*	.00*	1.00	.133	1.00
Total Differences	2	11	6	1	2	0

Table 13. Differences Between Means of School Leaders of 1-100 Enrollment and Those of 301-500 Student Enrollment

Recommendation	School Size	
	1-100 (n=26) M	301-500 (n=37) M
Require Accreditation by a Nationally Recognized Organization	2.04	2.91
Close All Programs Without a 90% Passage Rate on State Exams	1.65	2.91
Insist on Graduate Licensure Based on Demonstrated Performance In Subject Matter as Well as Teaching Knowledge	2.35	3.03
Develop Extended Graduate Level Teacher Education Programs As the Norm	1.96	2.57
Establish Teacher Preparation as a University-Wide Priority	2.39	2.97
Require Accountability Standards for Teacher Preparation Similar to Those Mandated by NCLB	2.35	3.05
Utilize Public Policy as a Vehicle to Enhance Teacher Education	1.84	2.57
Commission Periodic Independent Reviews of Teacher Education by Outside Agencies	2.19	2.90
Teacher Education Faculty Work with University Presidents To Take Active Role in Shaping Public Policy Surrounding Teacher Education	2.31	2.92
Institute a Common Rigorous Exit/Licensure Test	1.62	2.51
Require a Core Curricula in Pedagogy Based on Latest Research on Student Learning	2.46	3.19

Table 14. Differences Between Means of School Leaders with 500+ Enrollment and Those with 1-100 Student Enrollment

Recommendation	School Size	
	1-100 (n=26) M	500+ (n=53) M
Require Accreditation by a Nationally Recognized Organization	2.04	2.57
Close All Teacher Education Programs Without a 90% Passage Rate	1.65	2.17
Insist on Graduate Licensure Based on Demonstrated Performance In Subject Matter as Well as Teaching Knowledge	2.35	3.06
Utilize Public Policy as a Vehicle to Enhance Teacher Education	1.85	2.43
Institute a Common Rigorous Exit/Licensure Test	1.62	2.59
Require a Core Curricula in Pedagogy Based on Latest Research on Student Learning	2.46	3.34

Table 15. Differences Between Means of School Leaders with 1-100 Student Enrollment and Those with 101-300 Student Enrollment

Recommendation	School Size	
	1-100 (n=26) M	101-300 (n=50) M
Institute a Common Rigorous Exit/Licensure Test	1.62	2.14
Require a Core Curricula in Pedagogy Based on Latest Research on Student Learning	2.46	2.98



Table 16. Differences Between Means of School Leaders with 101-300 Student Enrollment and Those with 301-500 and 500+ Student Enrollment

Recommendation	School Size		
	101-300 (n=50) M	301-500 (n=37) M	500+ (n=53) M
Commission Periodic Independent Reviews of Teacher Education by Outside Agencies	2.34	2.89	ns
Require an Academic Major in Subject Area Taught	2.65	ns	2.94
Institute a Common Rigorous Exit/Licensure Test	.62	ns	2.59

### *Question Eight*

Research Question 8: What are the perceptions of teacher educators and school leaders regarding teacher guarantees?

In answer to this question a cross-tabulation was conducted to calculate the percentage of school leaders and teacher educators who answered “yes” and “no.” Results indicated that 52.9% of school leaders perceived teacher guarantees as important for teacher education programs to implement. By comparison, only 27.4% of teacher educators perceived teacher guarantees as important.

In addition, a cross-tabulation was conducted to calculate the percentage of respondents across each state who answered “yes” and “no” to teacher guarantees. Results indicated that 40.0% of respondents from Minnesota, 43.0% of respondents from North Dakota, and 63.3% of respondents from Montana favored teacher guarantees.

### *Question Nine*

Research Question 9: Is there a difference between teacher educator and school leader perceptions of teacher guarantees?

In order to answer this question Chi Square was calculated to determine if the differences were significant. Overall Chi Square for differences between school leaders and teacher educators was calculated at 11.912 with 1 degree of freedom. This differential is statistically significant at  $<.05$ . Over half of the school leaders surveyed indicated agreement with teacher guarantees (52.9%) yet only 27.4% of teacher educators concurred with the idea of a teacher warrantee.

Next, a Pearson Chi Square was calculated to determine if the differences between respondents from the three states was significant. The result was a Chi Square of 7.469 with 2 degrees of freedom. This differential is also statistically significant at  $<.05$  indicating there are significant differences between respondents from Minnesota, North Dakota, and Montana in relation to their perceptions of teacher guarantees. Survey respondents from Montana indicated agreement with teacher guarantees at a rate of 63.3% while less than half of the respondents from North Dakota (43.0%) and Minnesota (40.0%) agreed with the idea of teacher warrantees.

### *Question Ten*

Research Question 10: What three recommendations do teacher educators and school leaders report would have the most impact on enhancing the quality of the teacher in the classroom?

Survey question 33, used an open-ended format to gather data to answer this question and the results were analyzed using frequency counts. Respondents were asked

to identify three of the recommendations, which they felt would have the greatest impact on improving teacher education and enhancing student achievement. Data were tabulated and then re-tabulated to ensure accuracy. A total of 233 respondents listed three recommendations they felt would have the most impact on enhancing the quality of the teacher in the classroom.

School Leaders, as an entire group, listed the mandate for extensive “clinical” practice for teacher candidates similar to that given prospective medical practitioners and the establishment of schools of education as “teaching hospitals” as their top recommendation to enhance teacher preparation. The requirement of core curricula in pedagogy for teacher candidates based on the latest research on student learning received the second highest number of responses for enhancing teacher education. Finally, school leaders chose the requirement of a year-long internship as their third top choice for enhancing the field of teacher education. It is of interest that the American Federation of Teachers in its report, *Building a Profession, Strengthening Teacher Preparation and Induction* (2000) put forth all of the top choices of school leaders. Table 17 illustrates the results of the data tabulation for school leaders. Table H in Appendix C presents the full results of this tabulation.

Teacher educators, as a group, chose the same recommendations as school leaders for their top three choices on survey question 33. Their top recommendation was to mandate extensive “clinical” practice for teacher candidates similar to that given prospective medical practitioners. Requiring a year-long teaching internship before entry into the field received the second highest amount of responses by teacher educators as a whole. Finally, requiring core curricula in pedagogy for teacher candidates based on the



Table 17. Frequencies of Responses to the Top Three Recommendations by School Leaders

Recommendation	Frequency
Mandate Extensive "Clinical" Practice for Teacher Candidates Similar to That Given Prospective Medical Practitioners. Establish "Teaching Hospitals"	45
Require Core Curricula in Pedagogy Based on the Latest Research on Student Learning	44
Require a Year-Long Teaching Internship Before Entry Into the Field	29

latest research on student learning was the third top choice of teacher educators as a group. Of interest again is that all recommendations considered in the top three by teacher educators as a whole, were ones put forth by the American Federation of Teachers in 2000. Table 18 illustrates the results of the tabulations for teacher educators as a whole. Table I in Appendix C presents full results of this tabulation.

Table 18. Frequencies of Teacher Educator Responses to the Top Three Recommendations

Recommendation	Frequency
Mandate Extensive "Clinical" Practice for Teacher Candidates Similar to That Given Prospective Medical Practitioners. Establish Schools of Education as "Teaching Hospitals"	23
Require a Year-Long Teaching Internship Before Entry Into the Field	18
Require Core Curricula in Pedagogy for Teacher Candidates Based on the Latest Research on Student Learning	13

### *Question Eleven*

Research Question 11: Are there differences in the three recommendations teacher educators and school leaders perceive would have the most impact on enhancing the quality of the teacher in the classroom?

Information gathered from survey question 33 were again used to answer this question. When broken down further; elementary, secondary, and other school leader perceptions differed slightly as to their top three recommendations. Table 19 shows these differences.

Table 19. Summary of Top Three Recommendation Responses of School Leaders by Position

Secondary School Leaders	Elementary School Leaders	Other School Leaders
Require Core Curricula in pedagogy for teacher candidates based on the latest research on student learning	Mandate extensive "clinical" practice for teacher candidates similar to that given prospective medical practitioners. Establish schools of education as "teaching hospitals"	Require Core Curricula in pedagogy for teacher candidates based on the latest research on student learning
Require campus wide reviews of teacher education programs on a regularly scheduled basis	Require a year long internship before entry into the field	Mandate extensive "clinical" practice for teacher candidates similar to that given prospective medical practitioners. Establish schools of education as "teaching hospitals"
Require teacher preparation programs to ensure that their graduates are supported, monitored, and mentored as they enter the field	Require Core Curricula in pedagogy for teacher candidates based on the latest research on student learning	Require teacher preparation programs to ensure that their graduates are supported, monitored, and mentored as they enter the field

Elementary and secondary teacher educators as well as other faculty surveyed also differed slightly in their top three recommendations. Table 20 shows a comparison of this information.

Minimal differences exist between teacher educators and school leaders as to their overall choice of recommendations they believe would most enhance teacher education. Both groups, as a whole, observed the need for longer internships, more clinical training,



Table 20. Summary of Top Three Recommendation Responses of Teacher Educators by Position

Secondary Teacher Educators	Elementary Teacher Educators	Other Faculty
Mandate extensive "clinical" practice for teacher candidates similar to that given prospective medical practitioners. Establish schools of education as "teaching hospitals"	Require a year-long internship before entry into the field	Mandate extensive "clinical" practice for teacher candidates similar to that given prospective medical practitioners. Establish schools of education as "teaching hospitals"
Require a year-long internship before entry into the field	Establish the preparation of teachers as a university-wide priority with expected financial support from the institution's president and high level officials	Require a year long internship before entry into the field
Establish the preparation of teachers as a university-wide priority with expected financial support from the institution's president and high level officials	Mandate extensive "clinical" practice for teacher candidates similar to that given prospective medical practitioners. Establish schools of education as "teaching hospitals"	Require core curricula in pedagogy for teacher candidates based on the latest research on student learning

and a pedagogy requirement based on the latest research on student learning as the most important for enhancing the field of teacher education. School leaders also listed a mentoring component as well as campus-wide reviews of teacher education programs among their top three recommendations. Teacher educators listed the establishment of teacher education as a university-wide priority among their top three recommendations.

### *Question Twelve*

Research Question 12: What additional recommendations do school leaders and teacher educators have to enhance teacher education?

Survey question 34 was used to gather information to answer this question.

Respondents provided a multitude of comments suggesting additional recommendations for teacher education reform. All responses to this question were grouped and analyzed



for trends using the constant comparative method, a recognized qualitative data analysis methodology (Maykut & Morehouse, 1994). Five themes emerged as a result of this analysis. A full list of tabulated responses is provided in Appendix B.

### *Theme One*

The first, and strongest theme that emerged was that of the importance of providing teacher candidates enhanced opportunities for early and on-going observation and practice. One respondent wrote of the need for “frequent and early observation in classrooms of master teachers”. Another wrote of the importance of “encouraging a variety of pre-service learning contexts that represent the diversity of the nation and are framed within real-world situations” for teacher candidates. A third wrote of the need for “quality student teaching which includes frequent supervision from both college and school staff”. Several respondents reported the need for “paid internships” as a part of enhanced practice for teacher candidates.

### *Theme Two*

A second theme that emerged from this analysis was the need for an inclusive curriculum for teacher education that contains both a strong classroom management component as well as a relational component. The highest number of responses suggested some form of classroom management as important in the effective preparation of teachers. One respondent wrote of it like this: “significant practice, in real-world situations, of classroom management strategies, discipline strategies, and conflict resolution is the most important skill a prospective teacher can graduate with.”

Student/parent relationships and the need for the development of a service character were also determined as important within teacher education curriculum. One

respondent wrote "it is hard to measure but it is important to insure that teacher candidates have a service minded character, are positive influences, and have the ability to inspire others." Another wrote that it was important to screen "to see if they like kids and can work with them." A third wrote of the importance for teacher candidates to have an ability to "empathize with struggling learners." Another respondent wrote of the need for teacher candidates to be "good with parent communication and as well as to be inviting to the public." Finally one school leader wrote of the importance of "being service minded and understanding the need to assist way beyond the classroom doors."

### *Theme Three*

A third theme that emerged was one pertaining to teacher education faculty. Strong support was provided for the need for those preparing prospective teachers to understand and have experience with actual K-12 teaching. One respondent wrote this: "There is a need to raise the ability level of education faculty and their understanding of real world teaching issues." Another wrote, "College professors must have actual teaching practice." A final respondent wrote, "College teachers should have, at a minimum, 10 years of recent K-12 experience."

### *Theme Four*

A fourth strong theme that emerged from the analysis of information was that of what not to do. Several respondents cautioned the use of higher GPA as an entry criterion for teacher education programs. One respondent wrote, "Students with high GPA's can't relate to the average or below average student. They don't usually make the best teachers." Others cautioned the use of tests. "Tests don't tell us everything," wrote one respondent. Another wrote, "Test taking does not measure teaching effectiveness."



The politicalization of teacher education was also seen as a very strong negative. One respondent wrote: "Don't let political agendas drive teacher preparation, drive this by the suggestions of the experts in learning." Another wrote: "NCLB is NOT THE ANSWER."

#### *Theme Five*

The last theme that strongly emerged was the need for more money in teaching and teacher education. The need to increase teacher salaries was noted extensively as a way to entice quality people into the field of teaching. "Until salaries are raised, and teaching is recognized as the profession it is, we will get nowhere," wrote one respondent. Another wrote, "If we want the quality everyone deserves, we must lobby for more money at all levels of education." It was clear from this information that school leaders and teacher educators recognize the need for more money for teacher education as well as for teacher salaries.

In summary, school leaders and teacher educators have identified the reform recommendations they perceive would most enhance the field of teacher preparation, and as a result, put more teachers in the classroom who are capable of increasing student achievement. In general, there is more agreement than difference between and among school leaders and teacher educators. School leaders showed greater difference between themselves in the perception of teacher education reforms with leaders of larger schools tending to perceive the recommendations as more important than those of smaller schools. Teacher educators, on the other hand, showed no significant difference among themselves. As a whole, respondents rated seventeen of the twenty-six proposed reform



recommendations as having little importance in enhancing the field of teacher preparation and ultimately increasing the quality of the teacher in the classroom.

Both groups appear to recognize that there is room for change in teacher education and both groups have definite perceptions as to which proposed recommendations will accomplish this reform. In addition, both groups provided interesting comment as to their own suggestions for teacher education reform, few of which were mentioned in the published teacher education reform reports.

The final chapter of this paper provides a summary and discussion of the results of this study. Recommendations for change as well as for further research are presented.

## CHAPTER V

### SUMMARY, DISCUSSION, and RECOMMENDATIONS

#### Summary

With increasing political pressure and calls for reform in teacher education, there is a need to make sound decisions. Teacher education remains a topic of national concern and today it is at a crossroads (AACTE, 2005; Fenstermacher, 2002). Current research strongly suggests that student performance depends heavily on teacher competence and that quality teacher preparation ought to be defined in those terms (Cochran-Smith, 2003a; Darling-Hammond & Sykes, 2003; Hart & Teeter, 2002). Professionals in the field staunchly advocate enhanced curriculum and experience for teacher candidates as a means to meet this mandate (Cochran-Smith, 2001, 2002; Darling-Hammond, 2002, 2005). Others call for the elimination of teacher education in favor of an apprenticeship-type training (Finn, 2006; Kanstoroom, 1999). Several prominent educational organizations have weighed in on the matter (AASCU, 2004; ACE, 1999; AFT, 2000, SHEEO, 1999)

Recommendations for reform are common, yet few have a solid research base (Education Commission of the States, 2000). Teacher education programs, along with the field of education as a whole, tend to flow with the current trend. In today's climate of accountability, that is a dangerous practice (Cochran-Smith, 2005).

Teaching is a complex process, and to make matters worse, there is no real agreement on what makes a “good” teacher (Cochran-Smith, 2004; Stronge, 2002). Over the last several years, report after report have been released recommending specific reforms in the preparation of teachers (American Association of State Colleges and Universities, 2004; American Council on Education, 1999; American Federation of Teachers, 2000; National Alliance for Business, 2001; National Commission on Teaching and America’s Future, 1996; State Higher Education Executive Officers, 1999; U.S. Department of Education, 1999). There is a great deal of debate over the essential elements of teacher preparation with little research to back it up ( Davis, Williams, & Griffin, 2003; ECS, 2000). Much work is left to do.

This study looked at twenty-five proposed reform recommendations for the field of teacher education from the perspective of both teacher educators and school leaders. A survey, encompassing various reform recommendations from the major reports released over the past 10 years, was developed and distributed by e-mail to public school leaders and teacher educators in three northern States. Of the original 2,072 surveys e-mailed, 234 useable responses were returned including 172 from school leaders and 62 from teacher educators across the three states.

In the survey, participants were asked to give their perceptions on the various reform recommendations in relation to their ability to enhance the field of teacher education and ultimately raise the ability of the classroom teacher. Additionally, participants were asked to provide comment on any other suggestions they felt may be necessary to enhance the effectiveness of teacher preparation programs.



## Discussion

Several conclusions regarding the proposed reform recommendations to teacher education were derived from this study. First, there is common agreement among the respondents, across a number of the proposed recommendations for teacher education reform. School leaders and teacher educators both perceive an importance in developing strong links between teacher education programs and local school districts. Both groups rate this recommendation as “very important” in the quest to enhance the preparation of teacher candidates.

As early as the 1980s reform reports began to advocate the creation of partnerships between universities and the public schools as a means to improve teacher preparation (Ginsberg & Rhodes, 2003). “Collaboration through partnerships toward the common goal of improving teacher quality shows promise as an effective approach to creating lasting change in teacher preparation programs” (USDOE, 2005a, p. 6). Respondents in this study strongly perceived that building a dynamic system of teacher preparation will require frequent and on-going collaboration on many fronts (National Association of State Boards of Education, 2000).

It is interesting that both groups of respondents felt so strongly about this recommendation yet few sustainable formal partnerships exist. This may be due to the fact that these types of partnership take time and a great deal of two-way communication to build and sustain. P-16 initiatives may be the formal vehicle to support these partnerships; however, even when states require and support P-16 initiatives, the research is mixed as to their success (AACTE, 2005; Schmidt, 2006; West Georgia P-16, 2006). Nevertheless, school leaders and teacher educators must forge ahead to develop strategic

formal and informal partnerships that will be mutually beneficial and enhance K-12 education as well as teacher education.

Both groups agreed that another important factor in enhancing teacher education is to insure that programs have the necessary resources and support to assist teacher candidates in becoming proficient with technology. This recommendation has been proposed by several prominent educational agencies and organizations including the U.S. Department of Education (1999), the Carnegie Corporation (2001), the American Association of State Colleges and Universities (2004), and the State Higher Education Executive Officers (1999).

Today's world has changed. All knowledge centers on the planet are connected together in a single global network (Friedman, 2005). In addition, information doubles at a rate that was incomprehensible just a few years ago (USDOE, 2005a). Students in the 21<sup>st</sup> century cannot be mere knowledge vessels (NCATE, n. d. b). If they are to be successful and remain marketable, they must be problem-solvers who are proficient with the various forms of technology available to them (Freidman, 2005). That means continued and on-going exposure from preschool through the collegiate level (AASCU, 2004). Teacher education has the responsibility to turn out professionals capable of meeting this challenge (Carnegie Corporation, 2001, Freidman, 2005). School leaders and teacher educators in this study recognized this reality and must continue to act on it.

Teacher educators and school leaders also indicated strong agreement in this study that requiring core curricula in pedagogy for teacher candidates based on the latest research on student learning, as proposed by the American Federation of Teachers (2000), would improve the field of teacher education and ultimately enhance the ability



of the classroom teacher to raise student achievement. This is consistent with current research that reports capable teachers possess a strong understanding of pedagogy, are flexible in their approach to students, and are skilled in how to teach children of differing backgrounds and abilities (AFT, 2000; Darling- Hammond, 1998; ECS, n. d. a). Results of this study indicate that school leaders and teacher educators concur.

Respondents provided strong comment as to what additional types of pedagogical knowledge is necessary. Teacher education must insure that candidates have a strong understanding of and be capable of providing subject specific pedagogy as well as a flexible style of instruction. Other “real world” skills must also be addressed in these courses. The learner in the 21<sup>st</sup> century is different (Friedman, 2005). Teacher education programs must prepare teachers capable of reaching this new type of student.

Mentoring and the need for on-going support for beginning teachers was another area that school leaders and teacher educators perceived as very important in enhancing the field of teacher preparation. Learning to teach is a complex process and beginning teachers do not enter the classroom as finished products (Educational Testing Service, 2004). Several studies have shown the effectiveness of mentoring and induction programs yet very few states support such initiatives financially including those within this study (ECS, 2000; Feiman-Nemser, 2003; McRobbie, 2000; National Governor’s Association, 2002; Oregon University, 2000). Many teachers entering the field for the first time recognize the weakness of their preparation (National Center for Education Statistics, 1999b).

The strategy of supporting novice teachers through mentoring and induction is critical for teacher preparation programs (USDOE, 2005b). Effective mentoring



programs offer ongoing support and involve partnerships between colleges and local school districts (Mendel, 2006; New Teacher Center, 2006). "A seamless process of professional learning that begins in preservice education, continues through the early years of induction, and extends through the years of developing accomplished practice is needed" (Darling-Hammond, 1998, p. 9). Respondents in this study recognized this importance and now must act to develop sustainable and supported mentoring programs that are collaborative efforts between teacher education programs, local school districts, and state departments of education. It is interesting to note that none of the three states included in this survey have mentor programs that are supported financially. All have had support in the past but, as priorities have changed, funding has deteriorated. Mentoring, in all 3 cases, is the responsibility of the local school district.

Finally, both groups determined little need for the recommendation by the National Commission on Teaching and America's Future (1996) to close teacher education programs that do not have a 90% graduate passage rate on state licensure exams. The U. S. government would like the testing of teacher candidates as a measure of teacher education quality even when questions persist as to whether tests are truly adequate measures of quality teacher preparation (National Research Council, 2000; U.S. Department of Education, 2005a). In the words of one respondent "Test taking does not measure teaching effectiveness." Respondents in this study, as a whole, perceived little benefit from teacher testing.

Unsurprisingly there were differences between the perceptions of school leaders and teacher educators. Most differences were area specific. Teacher educators viewed most reform recommendations as only "somewhat" important on the average. Teacher

educators may have a reluctance to change because the process seems difficult. Many have watched, in horror at times, some of the changes brought about in K-12 education because of political pressure. It is clear that teacher educators want to produce capable teachers but are reluctant to acquiesce to what they perceive as unfounded (and often unfunded) mandates.

As a group teacher educators perceived university support, public policy, and teacher education curricular issues as most important. These are appropriate recommendations to embrace. Teacher education plays an insignificant role on most college campuses even though these programs have high numbers of students. Teaching is one of the most important professions and teacher educators must work hard to lobby for support from superiors. Political action is also appropriate. Teacher educators must demand a place at the policymaking table. Curricular reforms are necessary and it is wise that teacher educators recognize this need

Leaders of K-12 schools tended to rate the reform recommendations a bit higher than teacher educators. Together K-12 leaders determined that accountability measures and standards were most important in the reform of teacher education. This is also not surprising. School leaders have lived with reform for several years and, along with the struggles, have seen its benefits. Standards and accountability are common terms in K-12 education. They did not come about easily, and still have some problems, but in the end, much about standards and accountability is positive.

In addition, school leaders must hire teachers who are capable of meeting accountability measures set for K-12 education. It stands to reason that they would want



beginning teachers who were firmly grounded in K-12 student standards and were adept at enhancing student achievement through these standards.

Leaders of public elementary and secondary schools observed a strong need to incorporate K-12 standards and curriculum within teacher education programs. There is no question, in today's world, that K-12 education is focused on standards for student learning. This may be the reason for the vigorous support school leaders lend to this reform recommendation.

Interestingly, teacher educators, while rating this recommendation as only "somewhat" important on the average, indicate mixed perceptions as to its importance. Some teacher educators perceive alignment of teacher education with K-12 standards as "very important" while others rate it as "not important" at all. In the words of one respondent, "The standards movement in education is well intended but misguided. To force these standards on teacher education will not enhance the quality of teacher candidates."

The National Commission for Teaching and America's Future (1996) as well as the American Federation of Teacher's (2000) reform reports compel teacher education to conform to the K-12 student standards movement. Often standards directly influencing teacher preparation often have little relation to those affecting local school districts (Abell Foundation, 2001a; Ballou & Podgursky, 2000; Cross & Rigden, 2002). In specific, the goals and expectations of teacher education programs are often incongruent with those of local schools (Abernathy, Forsyth & Mitchell, 2001). School leaders in this study believe this is an important area for teacher education to explore as the profession moves forward



with reform. They need teachers who are familiar and adept with standards and expect teacher education programs to provide these candidates.

Teacher educators are less inclined to believe that the alignment with K-12 standards is important. The incorporation of K-12 standards to teacher education will not come easy and, if attempted, must be carefully thought-out. Any incorporation of K-12 standards into teacher education must be accompanied by concomitant research measuring impact and outcome at all levels.

School leaders in this study also felt it important to require accountability standards for high-quality teacher preparation similar to those mandated in K-12 by *The No Child Left Behind Act* (2001). This is not surprising. The U.S. Department of Education (1999) as well as the Carnegie Corporation (2001) called for teacher education programs to develop accountability standards as part of reform. Since the single most important factor in student achievement is the expertise of the teacher, it makes sense that teacher education programs must be accountable for providing high-quality teacher preparation (Darling-Hammond, 2000, 2002).

Finally, as a group, school leaders perceived two proposals by the American Council on Education (1999) as "very important" in enhancing the field of teacher education. These included the recommendation to commission periodic appraisals of teacher education programs by outside agencies as well as the requirement for campus-wide reviews of teacher education programs on a regularly scheduled basis. Again, it appears that school leaders were recommending on-going standards and accountability related to high quality teacher preparation.

Teacher educators, on the other hand, perceived a great need for faculty to work closely with university presidents to shape public policy on educational issues, a recommendation proposed by SHEEO (1999). A recent report released by the Center for the Study of Teaching and Policy found no rigorously conducted studies that focused on the direct relationship between policies and the quality of teacher preparation (Wilson, Floden, & Ferrini-Mundy, 2001). At best there is “little solid empirical research to support the adoption of policies intended to raise the quality of teacher preparation” (p. 25).

Current Secretary of Education, Margaret Spellings, recently commented that there is much to learn about quality teacher preparation (USDOE, 2005b). This uncertainty has spurred policymakers and educators alike to adopt ineffective educational policies that do not support or improve student learning (Cochran-Smith, 2005; Darling-Hammond, 2002). Teacher educators in this study understand the importance careful policymaking in the reform movement. “It is time for those who care about public education to join the debate, challenge emerging practices, and build quickly on those most promising, those where the bottom line is student learning” (Cochran-Smith, 2005, p. 15). Teacher educators are wise to see the need for this and must demand to be a part of educational policymaking. They are the ones, in the trenches, preparing our nation’s teaching force. They have the expertise and experience to promote educational policies capable of achieving the new mandates for the profession.

Similarly, teacher educators in this study determined as important the U.S. Department of Education’s proposal to establish the preparation of teachers as a university-wide priority with expected financial support from the institution’s president



and high-level officials. This recommendation is recognized as pivotal for sustained enhancement of teacher education by several higher education authorities including the State Higher Education Executives (1999), the American Council on Education (1999), and the American Association of State Colleges and Universities (2004). Teacher educators must work hard to promote a positive perception of teaching in general. There is a general lack of respect for teaching that is pervasive across the United States. This spills over into the university and may account for the lack of support given to teacher education. If teacher education seeks to improve, as well as enhance its image, the movement must start first with teacher educators themselves and then move to teacher education programs, and from there to university-wide support.

Teacher educators in this study perceived it to be “very important” to mandate a core of liberal arts courses for teacher candidates in an effort to assist them in gaining a solid foundation in the subject matter they will teach. There is robust agreement in the research that strong subject matter knowledge is critical in enhancing student performance (Carnegie Corporation of New York, 2006; Cochran-Smith, 2003a; Darling-Hammond, 1998; ECS, 2005; National Council on Teacher Quality, n. d.).

Capable teachers possess a firm degree of subject matter and broad content knowledge (Darling- Hammond, 1998). They are knowledgeable about what they are teaching and understand it enough to be flexible in their approach to subject matter (ECS, n. d. a). Teacher educators in these three states concur that intensive subject matter knowledge is imperative for teacher candidates to become effective educators in the 21<sup>st</sup> century.



Teacher educators also perceived the importance of mandating extensive “clinical” practice for teacher candidates similar to that given prospective medical practitioners. Not surprisingly, they rated as high the need to establish schools of education as “teaching hospitals,” a recommendation put forth by the Carnegie Corporation (2001), the American Federation of Teachers (2000), and the American Association of State Colleges and Universities (2004).

Research has placed emphasis on the need for teacher candidates to have more and varied actual classroom experience in their preparation programs (Center for Education Information, 1999). There is deliberation within the field regarding the appropriate amount of field experience prospective teachers should engage in as a part of their preparation program; however, it is clear that solid field experience with master teachers produces beginning teachers who are more effective (AASCU, 1999; AFT, 2000; ECS, 2000; Murray, 2005; NAB, 2001; NCTAF, 1996).

Because teacher candidates appear to learn best when the content and structure of their program closely corresponds with the experiences they have in K-12 schools, professional development schools and P-16 initiatives may offer the appropriate vehicles to achieve this mandate (National Association of State Boards of Education, 2000; SHEEO, 2003). Teacher educators and school leaders together must explore ways to enhance field and teaching experiences provided to teacher candidates so they are varied, rich, and in line with the “real world” of public school teaching.

Significant differences were noted on the various reform recommendations between elementary and secondary school leaders in this study. One interesting difference occurred on the recommendation by the American Federation of Teachers

(2001) to organize teacher education around standards for K-12 student achievement and curriculum. Elementary leaders rated this recommendation as very important while secondary leaders perceived it as only minimally so. Similarly, elementary leaders determined more importance in requiring campus wide reviews of teacher education programs on a regularly scheduled basis and on instituting higher entry criteria for admission into teacher education programs than did secondary school leaders.

In all cases the elementary school leaders perceived the reform recommendations as more important than did leaders of secondary schools. This may be because, as a whole, elementary schools have been more stirred by the standards movement and affected by the overall provisions of accountability than have secondary schools, and as a result more affected by ill-prepared teachers entering the profession (Broder, 2001; Finn, 2006; USDOE, 2002).

Differences between school leaders of varying school size were also noted. In general, leaders of small schools differed from those of other size schools most often. Small school leaders tended to perceive the recommendations as only minimally helpful while leaders of bigger schools tended to perceive the proposed reform recommendations in a more favorable light. This may be due to the fact that smaller schools have been less dramatically affected by the K-12 reform and accountability legislation and therefore; are more satisfied with the teachers who enter their schoolroom doors (Broder, 2001; Finn, 2006; USDOE, 2002). In addition, small schools hire less new teachers. As a result, leaders of small schools may not be as familiar with the quality of teacher candidates being turned out by teacher education programs.



Remarkably, no significant differences were found between secondary and elementary teacher educators on the reform recommendations, nor were any found among all teacher educators according to the size of their teacher preparation program. These findings, taken together, suggest overall agreement among teacher educators with regard to the reform of teacher education.

Differences across the states were noted among the respondents. In general, respondents from North Dakota perceived the reform recommendations less favorably than did respondents from the other states. Respondents from Montana rated the recommendations higher than those from the other two states more frequently. Most significant differences occurred between respondents from North Dakota and Montana as well as from Minnesota and North Dakota. The strength of Montana responses may be due to the smaller number of respondents from that state. It is of interest that respondents from North Dakota consistently rated the reform recommendations lower than those of the other states. It is also of interest that North Dakota respondents differed more often with respondents from both Montana and Minnesota.

The low perceptions from school leaders and teacher educators in North Dakota may indicate that they are satisfied with the quality of teacher education graduates and do not see the overall need for reform. When all seems well, there is no apparent need for change.

Montana has been in the midst of a teacher shortage and, as a result, has developed many innovative programs to fill these vacancies. In addition, Montana has under-funded education at both the K-12 and university level for years and many graduates of Montana institutions have left the state for higher-paying jobs elsewhere.



The high perceptions of teacher educators and school leaders toward the reform recommendations may indicate a general dissatisfaction with the quality of beginning teachers in that state. It may be that some of these programs, for many reasons, are not producing beginning teachers capable of meeting the educational mandates of the 21<sup>st</sup> century. It may also be that the best and brightest graduates from Montana institutions are leaving for jobs in other states.

Teacher warranties or guarantees are designed to provide assurances that teacher preparation programs are fully preparing their candidates for the practice of teaching (Earley, 2000). They were perceived differently across the groups of respondents in this study. Not unexpectedly, school leaders tended to favor them much more than did teacher educators. Provisions of *The No Child Left Behind Act of 2001* have stimulated a shift toward achievement and accountability in K-12 education. It could be that K-12 school leaders expect the same accountability from their counterparts.

Teacher preparation programs are beginning to be measured by the ability of their graduates to help students achieve (USDOE, 2005a). Policymakers and the public expect assurances (Earley, 2000). Comment in the open-ended section of this study suggests that teacher educators worry how this accountability will affect their programs.

Of interest, groups from Montana were most in favor of teacher guarantees followed by respondents from North Dakota and Minnesota. Again, is it because beginning teachers in Montana are not prepared to meet the challenges of the classroom? Further study is of teacher educators, school leaders, and beginning teachers in Montana is needed.

No significant research base exists from which to determine whether or not teacher warranties have had an impact on enhanced teacher effectiveness exists (ECS, n. d. b). Requests have been minimal and when these requests occur, it is for assistance with classroom organization or management skills, rarely for content-related issues (Duke, 1994; Earley, 2000; Rakes, Gullledge, & Rakes, 2005). It is important to point out that teacher guarantees will not in and of themselves bring about well prepared teachers (2005). Continued research into the use and effectiveness of teacher warranties is needed.

The open-ended portion of this study also revealed findings worthy of note. It is interesting to discern that, when given the opportunity for open comment, school leaders and teacher educators chose different recommendations as their top choices. When asked to list their top three recommendations for enhancing the field of teacher education both teacher educators and school leaders agreed. The top three reform recommendations for both groups included: mandating extensive "clinical" practice, requiring a year-long teaching internship, and requiring core curricula in pedagogy based on the latest research on student learning. Of interest is the observation that the American Federation of Teachers, a group highly familiar, as a whole, with the day-to-day practice and art of classroom teaching, put all of these reform recommendations forth in some form or another (2000).

Several conclusions were formulated as a result of the suggestions given by respondents to enhance the field of teacher education. Most respondents, when given the chance for independent comment provided valuable insight into what they perceived



would enhance the preparation of teachers, and ultimately increase the ability of the classroom teacher to advance student achievement. Five themes emerged.

The first and strongest was the recommendation to provide teacher candidates enhanced opportunities for early and on-going observation and practice throughout their program. This included the need for intense supervision and practice, “real-world” experiences, and the need for opportunity to work with “master teachers” in the field. This recommendation was put forth in only one reform report, published by the American Association of State Colleges and Universities in 2004. This recommendation is supported by both the research on professional development schools and P-16 initiatives and should be heeded by those looking to reform the field of teacher education (Ginsberg & Rhodes, 2003; Levine, 1988; Poe, 2003; USDOE, 2005a, Valli & Cooper, 1999).

A second noted theme was the need for an inclusive teacher education curriculum. Several suggestions were given by respondents including the need for enhanced classroom management techniques, an understanding of diversity, knowledge of differentiated instructional techniques, and an ability to build and develop positive relationships with students, peers, and families. These recommendations are notably absent from the published policy reports yet are mentioned in some of the research surrounding teacher education.

Superintendents, principals, and teachers say teacher education should put more emphasis on classroom realities (Public Agenda, 2003). School administrators prefer teachers who are effective in instructional preparation and planning, successful with classroom management, efficient in the delivery of instruction, and vigilant toward professional responsibilities such as accurate record keeping, communication with



families, professional growth, and contributing to the school as a whole (Danielson, 1996). When asked what teacher preparation programs could do to enhance the quality of teachers sent to them, principals in a previous study listed classroom management including discipline, subject specific teaching strategies, instructional use of assessment, and the use of a wider range of instructional strategies as priorities (Oregon University, 2000). All of these aspects were referred to strongly within this curricular reform theme and must not be ignored.

A third theme that emerged from the suggestions pertained to teacher educators. Strong support was seen for the need for teacher education faculty to understand and have current and on-going experience with actual K-12 teaching. Many saw the need for at least 10 years of teaching experience prior to becoming a faculty member. Others thought it important to use “guest” teachers or current practitioners as instructors in teacher education programs. Opinion research suggests that often the priorities of professors of education are different from those of parents, teachers, and the public (Public Agenda, 2003). This may be due to the job and career responsibilities placed upon university faculty as a whole. Often the only respected activity for a professor is research. Teacher education programs must support faculty involvement in K-12 education. It must be recognized, validated, and encouraged.

A fourth theme that emerged was that of “what not to do.” Respondents gave strong indication of what they felt would not enhance teacher education and provided comment as to why they felt the way they did. Among the strongest “no’s” were the uses of higher GPA and entry/exit tests. “Tests tell you nothing,” said one respondent. Another put the use of GPAs like this: “Grade point averages tell you nothing, most

people with high GPAs cannot relate to students in their classrooms. They cannot empathize with the struggling learner.” Most respondents providing comment also saw the politicalization of teacher education, measured accountability standards, and *No Child Left Behind* (2001) as definite negatives. Interestingly, all of these recommendations were present, in some form, in the most of the policy reports suggesting a possible disconnect between practitioners within the field and policymakers.

A final theme that strongly emerged was the need for more money in teaching and teacher education. “You can’t do more with less” was one respondent’s comment. The need to increase teacher salaries to entice people into the field of teaching was noted. In the words of one respondent: “It does not matter what we do, we need a strong group of candidates to enhance the field and to do that, we must enhance the image of teaching as well as the salaries.” Another expressed the fear: “If we keep expanding the requirements without increasing the salaries, the teacher shortage is sure to get worse.”

It is worth noting that financial support for education, as a whole, was never mentioned in any of the policy report yet results of this study make it clear that enhanced monetary contributions are necessary not only to enhance the field of teacher preparation but also to retain talented teachers in the profession. School leaders and teacher educators must tirelessly advocate for adequate financial support for the profession as a whole. This must occur from the grassroots to the national level and must be an on-going and sustained effort.

It is remarkable that many of the issues identified by the respondents in this portion of the study are not generally found in the proposed reform reports. Practicing school leaders and teacher educator perceptions of what it takes to enhance the field of



teacher preparation is not addressed in the policy reports. This should be a call to the profession to take up arms and begin advocating for what is necessary and right to keep teaching and teacher education moving forward in the 21<sup>st</sup> century.

Given the small number of respondents, from a small section of the country, this study cannot be construed to reflect the perceptions of school leaders and teacher educators across the nation. Results provide insight but should not be interpreted as encompassing.

#### Recommendations for Teacher Education Programs, School Leaders, and Teacher Educators

The findings of this study generated several recommendations relative to the field of teacher preparation.

1. Teacher education programs must offer enhanced opportunities for clinical practice and longer internships for teacher candidates. Teacher candidates must have early and on-going experiences in the classrooms of “master teachers.” They must also have repeated opportunities to view and participate in schools where “best practices” are in use. Universities should provide ongoing training to cooperating teachers. In addition, teacher candidates must have the opportunity to take part in a variety of field experience that encompasses all aspects of the profession. Internships should be longer and the profession should consider the requirement of a “paid internship” before final licensure is granted. Professional development schools, P-16 initiatives, and other collaborative



relationships must be examined as means to provide these enhanced experiences.

2. Teacher education programs must provide an enhanced curriculum. Education courses must fully integrate the practical concerns of teaching including classroom management, conflict resolution, discipline strategies, diversity issues, effective communication, instructional assessment, and the use of a wide range of instructional strategies. On-going opportunity for practice of these “real world” concerns must be provided. Attention must also be focused on the importance of contributing to the school as a whole and of teaching for the “greater good.”
3. Teacher education programs must ensure that solid subject matter knowledge is advanced in their candidates. This must be accomplished as a part of a balanced teacher education curriculum.
4. Teacher education programs must develop strong pedagogical components that include subject specific pedagogy and flexible instructional strategies that encompass 21<sup>st</sup> century learners.
5. Teacher education programs must ensure that teacher candidates are fully proficient with current technologies and can incorporate them meaningfully into learning contexts.
6. Teacher education programs should explore ways to incorporate K-12 standards and curriculum into teacher education. One way to do this is by making this an integrated component of field experience.

7. Teacher education programs along with state departments of education and local school districts must develop sustainable mentoring programs that are substantive in nature. They should ensure that all beginning teachers are mentored at different levels for at least 5 years into practice.
8. Teacher educators and school leaders must develop strong links with each other and work collaboratively to enhance the field of teacher preparation and, as a result, the teacher in the classroom. Cooperative agreements, relationships, and partnerships must be fostered on both sides of the aisle. P-16 initiatives may serve as the appropriate vehicle for this collaboration.
9. School leaders and teacher educators, along with teachers themselves, must work tirelessly to not only enhance the professional image of teaching but also to advocate for increased and adequate financial support for the profession.
10. Teacher educators and school leaders must become active in policymaking surrounding effective teacher preparation. Today there is little evidence that public policy on education makes a difference. Active professionals within the field, and the organizations that represent them, must take the lead and fight for research-based education policy.
11. Teacher educators must explore accountability measures that will serve to move the profession forward.
12. Teacher education faculty must remain active and engaged participants in K-12 education.

### Recommendations for Further Research

1. For comparative purposes, it is recommended that research similar to this study be conducted across other states to explore similarities and differences. In addition, beginning teacher perceptions should be included within the studies.
2. Teacher educators, in this study agreed more often with each other than they differed. Research conducted with a greater number of teacher educators, across a greater number of states and teacher education programs, would lead to a more thorough understanding of their perceptions of the various proposed teacher education reform recommendations.
3. School leader perceptions differed significantly in this study. Research with additional school leaders, across a greater number of states, would lead to a more thorough understanding of school leader perceptions of teacher education reform.
4. Research must explore teacher warrantee programs. Studies should focus on awareness and use of these programs as well as their outcomes and benefits.
5. Research on intensified field experience as well as on pedagogical elements and subject matter knowledge of teacher education curriculum must occur.
6. Research should explore the integration and use of K-12 standards and curriculum within teacher education programs.



7. Research should be conducted on the importance of differentiated preparation of teachers headed for rural, urban, and inner city schools.

The goal of this study was to determine and compare the perceptions of teacher educators and school leaders regarding various proposed teacher education reform recommendations. Findings indicate more agreement between the two groups than disagreement. Respondents provided strong comment as to what they felt would enhance the field of teacher preparation. This study adds to the growing body of research surrounding the reform of teacher education. Sustained improvement of teacher education will take on-going communication and collaboration between teacher preparation programs and K-12 educators and leaders. There is much work to do. This study provides guidance to those who wish to enhance the preparation of teachers and ultimately increase the quality of the teacher in the classroom.

## APPENDIX A

### SURVEY INSTRUMENT AND INFORMED CONSENT

## Educational Reform Recommendation Survey

[Exit this survey >>](#)

### 1. Informed Consent

You are invited to participate in a research study conducted by Ann Beste-Guldborg, M.A., Ph.D. candidate, under the supervision of Angela Koppang, Ph.D., Department of Educational Leadership at the University of North Dakota. The purpose of this study is to identify various factors that may enhance the field of teacher education.

As a school administrator or teacher educator, you know what skills are needed by prospective teachers to be highly effective in the classroom. At the same time, you may not often get the opportunity to inform the practice of teacher preparation. Teacher education programs across the country are currently in the midst of a reformation. Your response to this survey may improve our understanding of effective teacher preparation.

Approximately 15 minutes will be needed to complete the survey, which will be provided on a separate screen.

Please answer the questions carefully, as you will not be allowed to go back to previous screens for confidentiality purposes. Once you have finished the survey please click on the "done" button. A new screen will state that your information has been sent to the researcher. You may print this screen for your records as your copy of informed consent. When you finish, close your browser window to ensure confidentiality.

Your participation is completely voluntary and you can withdraw at any time. Further, you have the right to refuse to answer any items in the survey at any time. Finally, your name is never asked and the only identifying information is demographic in nature.

The information you submit to this study will be protected with the same encryption coding that is used in online credit card transactions. Once the information is downloaded to this researcher's records, it will be erased completely from the online database within one week. Research records will be kept confidential consistent with state and federal regulations. Access to data collected during the course of this study will be limited to the researcher, her advisor, and the people who audit research practices at the University of North Dakota (IRB Board).

If you have any questions or research-related problems, please contact either Ann Beste-Guldborg at 406-653-1200 ext 419/ [ann.beste.guldborg@und.nodak.edu](mailto:ann.beste.guldborg@und.nodak.edu) or Angela Koppang at 701-777-4255 o/ [angela.koppang@und.nodak.edu](mailto:angela.koppang@und.nodak.edu). If you have any other questions or concerns, please call Research Development and Compliance at 701-777-4279.



Finally, if you would like to receive information on the findings of this study, you may contact Ann Beste Guldberg at the above phone number or e-mail address.

Thank you for your time. If you consent to participating in the study, please print this form for your records and then click on the "Next" button.

Your participation is greatly appreciated!

**Next >>**

<http://www.surveymonkey.com/Users/62821704/Surveys/219151963498/04401EC3-DEC...> 8/25/2006

## Educational Reform Recommendation Survey

[Exit this survey >>](#)

### 2. Demographic Information

#### 1. What is your position?

- ☐ 1 Secondary Principal
- ☐ 2 Elementary Principal
- ☐ 3 Other School Administrator
- ☐ 4 Teacher Educator--Elementary
- ☐ 5 Teacher Educator--Secondary
- ☐ 6 Other Faculty

#### 2. In what state do you work?

- ☐ 1 Minnesota
- ☐ 2 North Dakota
- ☐ 3 Montana

#### 3. For school administrators--What is the percentage of students qualifying for free and reduced lunch in your school?

#### 4. For school administrators--How many students attend your school?

#### 5. For University faculty--What is the enrollment of your institution?

#### 6. For University faculty--How many students are enrolled in your teacher preparation program?

[Next >>](#)

## Educational Reform Recommendation Survey

[Exit this survey >>](#)

### 3. Teacher Education Reforms

Please indicate the degree to which you believe these proposed teacher education reform recommendations will increase the ability of the classroom teacher to enhance student achievement. Check the number that fits your perception.

**7. Require all programs that prepare teachers to be accredited by a nationally recognized organization.**

- ☐ 1 Not at all
- ☐ 2 Somewhat
- ☐ 3 Very much
- ☐ 4 Extremely

**8. Close all teacher education programs that do not have a 90% graduate pass rate on state licensure exams.**

- ☐ 1 Not at all
- ☐ 2 Somewhat
- ☐ 3 Very much
- ☐ 4 Extremely

**9. Insist that graduates of teacher education programs are licensed based upon demonstrated performance in subject matter as well as teaching knowledge and skill. (Demonstration of these skills would be shown through passage of a state test or through a portfolio process.)**

- ☐ 1 Not at all
- ☐ 2 Somewhat
- ☐ 3 Very much
- ☐ 4 Extremely

**10. Organize teacher education around standards for K-12 student achievement as well as K-12 curriculum**

- ☐ 1 Not at all
- ☐ 2 Somewhat
- ☐ 3 Very Much
- ☐ 4 Extremely

**11. Develop extended (graduate level) teacher education programs as the norm for entry into the field.**

- ☐ 1 Not at all



- ☐ 2 Somewhat
- ☐ 3 Very Much
- ☐ 4 Extremely

**12. Require a year long teaching internship before entry into the field.**

- ☐ 1 Not at all
- ☐ 2 Somewhat
- ☐ 3 Very much
- ☐ 4 Extremely

**13. Establish the preparation of teachers as a university wide priority with expected financial support from the institution's president and high level officials.**

- ☐ 1 Not at all
- ☐ 2 Somewhat
- ☐ 3 Very much
- ☐ 4 Extremely

**14. Develop strong links between teacher education programs and local school districts through joint councils and partnerships.**

- ☐ 1 Not at all
- ☐ 2 Somewhat
- ☐ 3 Very much
- ☐ 4 Extremely

**15. Require accountability standards for high-quality teacher preparation similar to those mandated in K-12 by No Child Left Behind.**

- ☐ 1 Not at all
- ☐ 2 Somewhat
- ☐ 3 Very much
- ☐ 4 Extremely

**16. Promote the use of shared resources and staff between teacher education programs and local school districts.**

- ☐ 1 Not at all
- ☐ 2 Somewhat
- ☐ 3 Very much
- ☐ 4 Extremely

**17. Require program integration at the university level between Colleges of Arts**

**and Sciences and Schools of Education to enhance the preparation of teachers in both subject matter and subject specific pedagogy.**

- ☐ 1 Not at all
- ☐ 2 Somewhat
- ☐ 3 Very much
- ☐ 4 Extremely

**18. Utilize public policy (through the passage of legislation) as a vehicle to enhance teacher education.**

- ☐ 1 Not at all
- ☐ 2 Somewhat
- ☐ 3 Very Much
- ☐ 4 Extremely

**19. Require campus-wide reviews of teacher education programs on a regularly scheduled basis.**

- ☐ 1 Not at all
- ☐ 2 Somewhat
- ☐ 3 Very much
- ☐ 4 Extremely

**20. Commission periodic independent appraisals of teacher education programs by outside agencies.**

- ☐ 1 Not at all
- ☐ 2 Somewhat
- ☐ 3 Very much
- ☐ 4 Extremely

**21. Ensure that teacher education programs have the necessary resources and support to assist teacher candidates in becoming proficient with technology.**

- ☐ 1 Not at all
- ☐ 2 Somewhat
- ☐ 3 Very much
- ☐ 4 Extremely

**22. Strengthen inter-institutional transfer and recruitment to increase the number of candidates entering the field of teacher education.**

- ☐ 1 Not at all
- ☐ 2 Somewhat
- ☐ 3 Very much

☐ 4 Extremely

**23. Require teacher preparation programs to ensure that their graduates are supported, monitored, and mentored as they enter the field.**

- ☐ 1 Not at all
- ☐ 2 Somewhat
- ☐ 3 Very much
- ☐ 4 Extremely

**24. Teacher education faculty should work with university presidents to take an active role in shaping public policy surrounding teacher education.**

- ☐ 1 Not at all
- ☐ 2 Somewhat
- ☐ 3 Very much
- ☐ 4 Extremely

**25. Mandate that teacher candidates take a core of liberal arts courses in order to gain a solid foundation in the subject matter they will teach.**

- ☐ 1 Not at all
- ☐ 2 Somewhat
- ☐ 3 Very much
- ☐ 4 Extremely

**26. Institute a higher entry criteria for admission into teacher education programs (a 2.75 GPA phased up to a 3.0 at the end of the sophomore year).**

- ☐ 1. Not at all
- ☐ 2 Somewhat
- ☐ 3 Very much
- ☐ 4 Extremely

**27. Develop a national entry test for admission into teacher education programs that is standard across the country and ensures college-level proficiency in math, science, English, and the humanities.**

- ☐ 1 Not at all
- ☐ 2 Somewhat
- ☐ 3 Very much
- ☐ 4 Extremely

**28. Require teacher candidates to have an academic major in the subject area they will teach.**



- ☐ 1. Not at all
- ☐ 2 Somewhat
- ☐ 3 Very much
- ☐ 4 Extremely

**29. Institute a common rigorous exit/licensure test**

- ☐ 1 Not at all
- ☐ 2 Somewhat
- ☐ 3 Very much
- ☐ 4 Extremely

**30. Require core curricula in pedagogy for teacher candidates based on the latest research on student learning.**

- ☐ 1 Not at all
- ☐ 2 Somewhat
- ☐ 3 Very much
- ☐ 4 Extremely

**31. Mandate extensive "clinical" practice for teacher candidates similar to that given prospective medical practitioners. Establish a schools of education as "teaching hospitals".**

- ☐ 1 Not at all
- ☐ 2 Somewhat
- ☐ 3 Very much
- ☐ 4 Extremely

**32. Do you think "teacher guarantees" would be appropriate where colleges of education would guarantee the quality of their graduates?**

- ☐ 2 No
- ☐ 1 Yes

**33. Please identify 3 of the recommendations which you feel would have the greatest impact on improving teacher education and enhancing student achievement.**

||

||

34. Do you have any additional recommendations to improve teacher preparation?  
If so, please list them here.

||

||

Done >>

APPENDIX B

OPEN-ENDED RESPONSES



## Teacher Education Curricular Recommendations

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### Recommendation

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Classroom Management & Discipline  
Conflict Resolution  
Understanding of Poverty  
Use of Assessment and Data to Inform Instruction  
Reading Strategies  
Writing Strategies  
Implementing Literacy Strategies Across the Curriculum  
Service—Willingness to Assist Beyond the Classroom  
Special Education Background for All Students  
International Experience  
Cultural Diversity Training  
Differentiated Instruction  
Independent Learning and Problem Solving Skills  
Goal Setting  
Science Strategies  
Time Management  
Ability to Facilitate and Understand Classroom Dynamics  
Parent Communication and Involvement  
Student Relations  
Technology Integration  
School Culture and Climate  
Charlotte Danielson's Frameworks  
Federal Mandates  
Spanish Fluency  
Math Strategies  
Interpersonal and Personal Communication Skills  
Ability to Integrate Content Across the Curriculum  
Multiple Intelligences  
Respect for Veteran Teachers  
Knowledge of the Variety of Settings Where Teachers Teach: Rural, Inner City, Etc.  
Instruction on Unions  
Curricular Knowledge  
Critical Thinking Skills  
Instruction on Public Policy  
Political Engagement  
Best Practices

Teach Candidates to Take Ownership for the Entire Child  
Instruction on the Hidden Curriculum in Schools  
Make Content of Teacher Preparation Uniform Across Universities

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### **Suggestions for Teacher Education Faculty to Enhance the Field of Teacher Preparation**

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#### **Suggestion**

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Use and model good pedagogy  
Use and model best practices  
Work together with Arts and Sciences  
Understand State Standards  
Use "guest" teachers who are current practitioners in the field  
All college professors should hold teaching degrees  
Spend lots of time in the schools  
View master teachers  
Visit model schools  
Work with school administrators to enhance the field  
Require education faculty to function like the faculty in pharmacy, engineering, and nursing

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#### **What is Not the Answer**

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#### **Comments**

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Don't evaluate faculty on the quality of the preparation of teachers  
Don't allow people to teach without teaching degrees  
NCLB  
Teacher Guarantees  
Testing is not the answer  
Bookwork does not provide adequate knowledge for teachers when they are in the field  
Eliminate the use of graduate assistants in teacher education classes  
Don't let political agendas drive teacher preparation  
Don't require a higher GPA

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## APPENDIX C

### TABLES



Table A. Means and *t*-test Results for Teacher Educators and School Leaders on Proposed Reform Recommendations

Recommendation	School Leader (n=172)		Teacher Ed (n=62).		<i>t</i>	<i>p</i>
	M	SD	M	SD		
Require Accreditation for all Teacher Education Programs	2.25	.83	2.74	.90	-1.50	.13
Close inadequate schools of education--those who have less than 90% graduate passage rate on licensure exams State Licensure Pass Rate is $\geq 10\%$	2.05	.82	1.77	.76	2.30	.02*
Graduates Licensed Based Upon Demonstrated Performance in Subject Matter and Teaching Knowledge	2.84	.80	2.95	.78	-.93	.36
Organize Teacher Education Around K-12 Standards	3.09	.73	2.70	.92	3.39	< .01*
Develop Extended Graduate Level Teacher Education as the Norm	2.31	.86	2.23	.89	.64	.50
Require Year-Long Internship	2.46	1.02	2.68	.84	-1.51	.13
Establish Teacher Prep as a University Wide Priority	2.73	.81	3.27	.81	-4.56	.00*
Develop Strong Links Between Teacher Education Programs and Local School Districts	3.20	.80	3.26	.77	-.47	.64
Require Accountability Standards for Teacher Prep Similar to Those Mandated by NCLB	2.68	.89	2.23	1.05	3.29	< .01*
Promote the Use of Shared Resources and Staff Between Teacher Education and Local School Districts	2.98	.78	2.80	.81	1.60	.11
Require Program Integration Between Colleges of Arts & Sciences and Teacher Education Programs	2.85	.80	3.00	.88	-1.07	.29
Utilize Public Policy to Enhance Teacher Education	2.36	.90	2.13	.86	1.75	.08

Table A cont.

Recommendation	School Leader (n=172)		Teacher Ed. (n=62)		<i>t</i>	<i>p</i>
	M	SD	M	SD		
Require Regular Campus-Wide Reviews of Teacher Ed Programs	2.77	.85	2.27	.94	3.79	.00*
Commission Periodic Independent Appraisals of Teacher Ed Programs by Outside Agencies	2.51	.85	2.19	.94	2.46	.02*
Ensure That Teacher Ed Programs Have Resources to Enhance Technology Proficiency of Candidates	3.23	.77	3.21	.87	.15	.89
Strengthen Inter-Institutional Transfer & Recruitment to Increase the Number of Candidate Entering the Field	2.74	.82	2.52	.88	1.84	.07
Require Teacher Prep Programs Support & Mentor Graduates as They Enter the Field	3.21	.74	3.03	.81	1.57	.12
Teacher Ed Faculty and Univ. Presidents Work Together to Take the Lead in Shaping Public Policy Surrounding Teacher Ed	2.65	.82	3.00	.83	-2.86	.01*
Mandate a Core of Liberal Arts Courses to Gain Solid Foundation in Subject Matter	2.63	.80	3.10	.82	-3.87	.00*
Institute a Higher GPA for Admission Into Teacher Ed	2.40	.84	2.60	.90	-1.59	.11
Develop National Entry Test for Admission Into Teacher Ed	2.32	.85	2.08	1.03	1.79	.07
Require an Academic Major	2.70	.86	2.76	.97	-.46	.65
Institute a Common Rigorous Exit/Licensure Test	2.27	.87	2.29	1.00	-.13	.90
Require a Core in Pedagogy Based on Latest Research on Student Learning	3.06	.82	3.35	.77	-2.42	.02*
Mandate Extensive Clinical Practice Similar to a "Teaching Hospital"	2.75	.89	3.05	.10	-2.32	.02*

Table B. Means, Standard Deviations, *t*-test Results, and Probability for Elementary and Secondary School Leaders on Proposed Reform Recommendations

Recommendation	Elementary (n=83)		Secondary (n=72)		<i>t</i>	<i>p</i>
	M	SD	M	SD		
Require Accreditation for all Teacher Education Programs	2.64	.83	2.50	.84	-1.028	.306
Close inadequate schools of education--those who have less than 90% graduate passage rate on licensure exams State Licensure Pass Rate is $\geq 10\%$	2.18	.81	1.93	.78	-1.951	.053
Graduates Licensed Based Upon Demonstrated Performance in Subject Matter and Teaching Knowledge	2.96	.72	2.74	.87	-1.777	.078
Organize Teacher Education Around K-12 Standards	3.22	.70	2.94	.75	-2.341	.021*
Develop Extended Graduate Level Teacher Education as the Norm	2.41	.91	2.19	.76	-1.581	.116
Require Year-Long Internship	2.51	1.00	2.43	1.03	-.461	.646
Establish Teacher Prep as a University Wide Priority	2.83	.79	2.61	.83	-1.685	.094
Develop Strong Links Between Teacher Education Programs and Local School Districts	3.25	.75	3.25	.82	-.024	.981
Require Accountability Standards for Teacher Prep Similar to Those Mandated by NCLB	2.80	.82	2.60	.96	-1.671	.097
Promote the Use of Shared Resources and Staff Between Teacher Education and Local School Districts	3.01	.79	2.96	.76	-.430	.667
Require Program Integration Between Colleges of Arts & Sciences and Teacher Education Programs	2.88	.77	2.82	.79	-.477	.634
Utilize Public Policy to Enhance Teacher Education	2.45	.97	2.21	.80	-1.649	.101
Commission Periodic Independent Appraisals of Teacher Ed Programs by Outside Agencies	2.52	.82	2.53	.82	.074	.941



Table B cont.

Recommendation	Elementary (n=83)		Secondary (n=72)		<i>t</i>	<i>p</i>
	M	SD	M	SD		
Ensure That Teacher Ed Programs Have Resources to Enhance Technology Proficiency of Candidates	3.28	.70	3.17	.84	-.891	.374
Strengthen Inter-Institutional Transfer & Recruitment to Increase the Number of Candidate Entering the Field	2.70	.78	2.81	.85	.817	.415
Require Teacher Prep Programs Support & Mentor Graduates as They Enter the Field	3.18	.68	3.26	.80	.696	.488
Teacher Ed Faculty and Univ. Presidents Work Together to Take the Lead in Shaping Public Policy Surrounding Teacher Ed	2.75	.76	2.51	.80	-1.850	.066
Mandate a Core of Liberal Arts Courses to Gain Solid Foundation in Subject Matter	2.71	.83	2.54	.79	-1.293	.198
Institute a Higher GPA for Admission Into Teacher Ed	2.57	.86	2.21	.79	-2.692	.008*
Develop National Entry Test for Admission Into Teacher Ed	2.42	.84	2.19	.82	-1.699	.091
Require an Academic Major	2.60	.81	2.82	.89	1.586	.115
Institute a Common Rigorous Exit/Licensure Test	2.34	.85	2.19	.85	-1.047	.297
Require a Core in Pedagogy Based on Latest Research on Student Learning	3.05	.78	3.14	.86	.688	.492
Mandate Extensive Clinical Practice Similar to a "Teaching Hospital"	2.82	.80	2.72	.94	-.696	.488
Require campus-wide reviews of teacher education programs	2.94	.82	2.63	.85	-2.353	.020*

Table C. *F* Values and Significance Comparing Secondary and Elementary Teacher Educators

Recommendation	<i>F</i>	Sig.
Require Accreditation for all Teacher Education Programs	.006	.936
Close inadequate schools of education--those who have less than 90% graduate passage rate on licensure exams	.500	.484
Graduates Licensed Based Upon Demonstrated Performance in Subject Matter and Teaching Knowledge	2.399	.130
Organize Teacher Education Around K-12 Standards	1.017	.320
Develop Extended Graduate Level Teacher Education as the Norm	.189	.666
Require Year-Long Internship	.070	.793
Establish Teacher Preparation as a University Wide Priority	.020	.888
Develop Strong Links Between Teacher Education Programs and Local School Districts	.551	.463
Require Accountability Standards for Teacher Preparation Similar to Those Mandated by NCLB	.243	.625
Promote the Use of Shared Resources and Staff Between Teacher Education and Local School Districts	.086	.771
Require Program Integration Between Colleges of Arts and Sciences and Teacher Education Programs	.133	.717
Utilize Public Policy to Enhance Teacher Education	3.821	.058
Require Regular Campus-Wide Reviews of Teacher Education Programs	.044	.835
Commission Periodic Independent Appraisals of Teacher Education Programs by Outside Agencies	.007	.396

Table C cont.

Recommendation	<i>F</i>	Sig.
Ensure that Teacher Education Programs Have the Necessary Resources to Enhance Technology Proficiency of Candidates	.065	.801
Strengthen Inter-Institutional Transfer and Recruitment to Increase the Number of Candidates Entering the Field	.000	.993
Require that Teacher Preparation Programs Support and Mentor Graduates as They Enter the Field	.041	.841
Teacher Education Faculty/University Presidents Work Together to Take the Lead in Shaping Public Policy Surrounding Teacher Education	.967	.332
Mandate a Core of Liberal Arts Courses to Gain a Solid Foundation in Subject Matter	.209	.650
Institute a Higher GPA for Admission Into Teacher Education	3.621	.065
Develop a National Entry Test for Admission Into Teacher Education	1.373	.249
Require an Academic Major	3.102	.086
Institute a Common Rigorous Exit/Licensure Test	.117	.734
Require a Core in Pedagogy Based on Latest Research on Student Learning	.191	.665
Mandate Extensive Clinical Practice Similar to a "Teaching Hospital"	1.366	.250



Table D. Means, *F* Values and Pairwise Difference Comparisons Between the States on Perceived Importance of Proposed Recommendations

Recommendation	MN <i>M</i>	ND <i>M</i>	MT <i>M</i>	<i>F</i>	<i>p</i>	MN/ND <i>p</i>	MN/MT <i>p</i>	ND/MT <i>p</i>
	n=85	n=100	n=49					
Require Accreditation for All Teacher Education Programs	2.66	2.58	2.76	.731	.483	1.000	1.000	.689
Close inadequate schools of education--those who have less than 90% graduate passage rate on licensure exams	2.06	1.81	1.87	2.312	.101	.107	.582	1.000
Graduates Licensed Based Upon Demonstrated Performance in Subject Matter and Teaching Knowledge	3.12	2.73	2.86	5.983	.003	.002*	.206	.912
Organize Teacher Education Around K-12 Standards	2.84	2.89	2.98	.508	.602	1.000	.944	1.000
Develop Extended Graduate Level Teacher Education as the Norm	2.22	2.31	2.45	1.291	.277	1.000	.415	.460
Require Year-Long Internships	2.71	2.37	2.73	3.704	.026	.054	1.000	.101
Establish Teacher Preparation as a University Wide Priority	3.06	2.91	3.08	.963	.383	.738	1.000	.755
Develop Strong Links Between Teacher Education Programs and Local School Districts	3.37	3.09	3.28	2.886	.058	.058	1.000	.524
Require Accountability Standards for Teacher Preparation Similar to Those Mandated by NCLB	2.47	2.46	2.41	.059	.943	1.000	1.000	1.000
Promote the Use of Shared Resources and Staff Between Teacher Education and Local School Districts	2.81	2.93	2.93	.673	.511	.878	1.000	1.000

Table D cont.

Recommendation	MN <i>M</i>	ND <i>M</i>	MT <i>M</i>	<i>F</i>	<i>p</i>	MN/ND <i>p</i>	MN/MT <i>p</i>	ND/MT <i>p</i>
	n=85	n=100	n=49					
Require Program Integration Between Colleges of Arts and Sciences and Teacher Education Programs	2.83	2.91	3.10	1.657	.193	1.000	.213	.584
Utilize Public Policy to Enhance Teacher Education	2.23	2.21	2.35	.437	.647	1.000	1.000	1.000
Require Regular Campus-Wide Reviews of Teacher Education Programs	2.52	2.42	2.73	2.133	.121	1.000	.550	.120
Commission Periodic Independent Appraisals of Teacher Education Programs by Outside Agencies.	2.39	2.21	2.59	3.375	.036	.484	.551	.033*
Ensure That Teacher Education Programs Have the Necessary Resources to Enhance Technology Proficiency of Candidates	3.22	3.19	3.28	.235	.791	1.000	1.000	1.000
Strengthen Inter-Institutional Transfer and Recruitment to Increase the Number of Candidate Entering the Field	2.53	2.57	2.94	4.501	.012	1.000	.015*	.029*
Require That Teacher Preparation Programs Support and Mentor Graduates as They Enter the Field	3.28	2.97	3.16	3.930	.021	.018*	1.000	.488
Teacher Education Faculty and University Presidents Work Together to Take the Lead in Shaping Public Policy Surrounding Teacher Education	2.80	2.77	2.99	1.220	.297	1.000	.601	.396
Mandate a Core of Liberal Arts Courses to Gain Solid Foundation in Subject Matter	2.91	2.76	3.02	1.885	.154	.625	1.000	.197

Table D cont.

Recommendation	MN <i>M</i>	ND <i>M</i>	MT <i>M</i>	<i>F</i>	<i>p</i>	MN/ND <i>p</i>	MN/MT <i>p</i>	ND/MT <i>p</i>
	n=85	n=100	n=49					
Institute a Higher GPA for Admission Into Teacher Education	2.51	2.37	2.75	3.294	.039	.806	.346	.033*
Develop a National Entry Test for Admission Into Teacher Education	2.18	2.09	2.47	3.090	.047	1.000	.216	.042*
Require an Academic Major	2.88	2.67	2.57	2.330	.099	.342	.139	1.000
Institute a Common Rigorous Exit/Licensure Test	2.45	2.08	2.41	4.814	.009	.013*	1.000	.089
Require a Core in Pedagogy Based on Latest Research on Student Learning	3.33	3.09	3.26	2.122	.122	.138	1.000	.677
Mandate Extensive Clinical Practice Similar to a "Teaching Hospital"	2.96	2.76	3.08	2.587	.077	.332	1.000	.108
Total Differences						3	1	4



Table E. *F* Values and Significance of Reform Recommendations for Teacher Educators Across Teacher Education Program Size

Recommendation	<i>F</i>	Sig.
Require Accreditation for all Teacher Education Programs	.441	.725
Close inadequate schools of education--those who have less than 90% graduate passage rate on licensure exams	.652	.585
Graduates Licensed Based Upon Demonstrated Performance in Subject Matter and Teaching Knowledge	.119	.948
Organize Teacher Education Around K-12 Standards	.200	.896
Develop Extended Graduate Level Teacher Education as the Norm	.985	.408
Require Year-Long Internship	1.214	.315
Establish Teacher Preparation as a University Wide Priority	.176	.912
Develop Strong Links Between Teacher Education Programs and Local School Districts	.401	.753
Require Accountability Standards for Teacher Preparation Similar to Those Mandated by NCLB	.536	.660
Promote the Use of Shared Resources and Staff Between Teacher Education and Local School Districts	1.845	.152
Require Program Integration Between Colleges of Arts and Sciences and Teacher Education Programs	1.189	.324
Utilize Public Policy to Enhance Teacher Education	.124	.945
Require Regular Campus-Wide Reviews of Teacher Education Programs	.723	.543
Commission Periodic Independent Appraisals of Teacher Education Programs by Outside Agencies	.639	.593

Table E cont.

Recommendation	<i>F</i>	Sig.
Ensure that Teacher Education Programs Have the Necessary Resources to Enhance Technology Proficiency of Candidates	.201	.895
Strengthen Inter-Institutional Transfer and Recruitment to Increase the Number of Candidates Entering the Field	.339	.797
Require that Teacher Preparation Programs Support and Mentor Graduates as They Enter the Field	2.217	.098
Teacher Education Faculty/University Presidents Work Together to Take the Lead in Shaping Public Policy Surrounding Teacher Education	1.357	.267
Mandate a Core of Liberal Arts Courses to Gain a Solid Foundation in Subject Matter	1.433	.245
Institute a Higher GPA for Admission Into Teacher Education	.411	.745
Develop a National Entry Test for Admission Into Teacher Education	.646	.589
Require an Academic Major	1.080	.367
Institute a Common Rigorous Exit/Licensure Test	.299	.826
Require a Core in Pedagogy Based on Latest Research on Student Learning	2.531	.068
Mandate Extensive Clinical Practice Similar to a "Teaching Hospital"	1.172	.330

Table F. Means, *F* Values, and Probability for School Leaders Across K-12 Enrollment Size

Recommendation	1-100 <i>M</i>	101-300 <i>M</i>	301-500 <i>M</i>	500+ <i>M</i>	<i>F</i>	<i>P</i>
	n=26	n=50	n=37	n=53		
Require Accreditation for All Teacher Education Programs	2.04	2.52	2.92	2.57	6.11	.001*
Close inadequate schools of education--those who have less than 90% graduate passage rate on licensure exams	1.65	1.96	2.27	2.17	3.71	.013*
Graduates Licensed Based Upon Demonstrated Performance in Subject Matter and Teaching Knowledge	2.35	2.74	3.03	3.06	6.02	.001*
Organize Teacher Education Around K-12 Standards	2.81	3.08	3.22	3.13	1.77	.115
Develop Extended Graduate Level Teacher Education as the Norm	1.96	2.40	2.57	2.21	3.20	.025*
Require Year-Long Internship	2.15	2.36	2.65	2.53	1.47	.226
Establish Teacher Preparation as a University Wide Priority	2.39	2.72	2.97	2.74	2.71	.047*
Develop Strong Links Between Teacher Education Programs and Local School Districts	2.85	3.14	3.35	3.32	2.69	.048*
Require Accountability Standards for Teacher Preparation Similar to Those Mandated by NCLB	2.35	2.56	3.05	2.70	3.86	.011*
Promote the Use of Shared Resources and Staff Between Teacher Education and Local School Districts	2.92	3.08	2.89	2.96	.48	.695
Require Program Integration Between Colleges of Arts and Sciences and Teacher Education Programs	2.73	2.72	3.05	2.87	1.48	.223
Utilize Public Policy to Enhance Teacher Education	1.85	2.36	2.57	2.43	3.83	.011*
Require Regular Campus-Wide Reviews of Teacher Education Programs	2.46	2.70	3.03	2.81	2.40	.070
Commission Periodic Independent Appraisals of Teacher Education Programs by Outside Agencies	2.19	2.34	2.89	2.55	4.68	.004*
Ensure That Teacher Education Programs Have the Necessary Resources to Enhance Technology Proficiency of Candidates	3.15	3.30	3.38	3.11	1.11	.347
Strengthen Inter-Institutional Transfer and Recruitment to Increase the Number of Candidate Entering the Field	2.46	2.84	2.95	2.68	2.11	.100



Table F cont.

Recommendation	1-100 M	101-300 M	301-500 M	500+ M	F	P
	n=26	n=50	n=37	n=53		
Require That Teacher Preparation Programs Support and Mentor Graduates as They Enter the Field	3.04	3.12	3.35	3.26	1.22	.303
Teacher Education Faculty and University Presidents Work Together to Take the Lead in Shaping Public Policy Surrounding Teacher Education	2.31	2.58	2.92	2.66	3.08	.029*
Mandate a Core of Liberal Arts Courses to Gain Solid Foundation in Subject Matter	2.54	2.52	2.68	2.72	.66	.580
Institute a Higher GPA for Admission Into Teacher Education	2.08	2.36	2.62	2.45	2.35	.074
Develop a National Entry Test for Admission Into Teacher Education	2.12	2.26	2.38	2.43	.97	.409
Require an Academic Major	2.65	2.48	2.68	2.94	2.60	.054
Institute a Common Rigorous Exit/Licensure Test	1.62	2.14	2.51	2.59	10.0 5	.000*
Require a Core in Pedagogy Based on Latest Research on Student Learning	2.46	2.98	3.19	3.34	7.70	.000*
Mandate Extensive Clinical Practice Similar to a "Teaching Hospital"	2.46	2.58	2.95	2.91	2.68	.049*

Table G. Significant Pairwise Comparison Between School Leaders of Varying K-12 Enrollment Size on Proposed Reform Recommendations

Recommendation	1-100 / 101-300	1-100 / 301-500	1-100 / 500+	101-300 / 301-500	101-300 / 500+	301-500 / 500+
Require Accreditation for All Teacher Education Programs	.09	.00*	.04*	.14	1.00	.26
Close inadequate schools of education--those who have less than 90% graduate passage rate on licensure exams	.68	.02*	.05*	.44	1.00	1.00
Graduates Licensed Based Upon Demonstrated Performance in Subject Matter and Teaching Knowledge	.21	.004*	.001*	.52	.23	1.00
Organize Teacher Education Around K-12 Standards	.72	.17	.37	1.00	1.00	1.00
Develop Extended Graduate Level Teacher Education	.18	.03*	1.00	1.00	1.00	.26
Require Year-Long Internship	1.00	.34	.74	1.00	1.00	1.00
Establish Teacher Preparation as a University Wide Priority	.53	.03*	.43	.90	1.00	1.00
Develop Strong Links Between Teacher Education Programs and Local School Districts	.76	.08	.08	1.00	1.00	1.00
Require Accountability Standards for Teacher Preparation Similar to Those Mandated by NCLB	1.00	.01*	.56	.06	1.00	.35
Promote the Use of Shared Resources and Staff Between Teacher Education and Local School Districts	1.00	1.00	1.00	1.00	1.00	1.00
Require Program Integration Between Colleges of Arts and Sciences and Teacher Education Programs	1.00	.67	1.00	.32	1.00	1.00

Table G cont.

Recommendation	1-100 / 101-300	1-100 / 301-500	1-100 / 500+	101-300 / 301-500	101-300 / 500+	301-500 / 500+
Utilize Public Policy to Enhance Teacher Education	.10	.01*	.03*	1.00	1.00	1.00
Require Regular Campus-Wide Reviews of Teacher Education Programs	1.00	.06	.53	.48	1.00	1.00
Commission Periodic Independent Appraisals of Teacher Education Programs by Outside Agencies.	1.00	.007*	.44	.01*	1.00	.32
Ensure That Teacher Education Programs Have the Necessary Resources to Enhance Technology Proficiency of Candidates	1.00	1.00	1.00	1.00	1.00	.64
Strengthen Inter-Institutional Transfer and Recruitment to Increase the Number of Candidate Entering the Field	.35	.13	1.00	1.00	1.00	.78
Require That Teacher Preparation Programs Support and Mentor Graduates as They Enter the Field	1.00	.63	1.00	.94	1.00	1.00
Teacher Education Faculty and University Presidents Work Together to Take the Lead in Shaping Public Policy Surrounding Teacher Ed	.98	.02*	.41	.32	1.00	.81
Mandate a Core of Liberal Arts Courses to Gain Solid Foundation in Subject Matter	1.00	1.00	1.00	1.00	1.00	1.00
Institute a Higher GPA for Admission Into Teacher Education	.94	.06	.35	.86	1.00	1.00



Table G cont.

Recommendation	1-100 / 101-300	1-100 / 301-500	1-100 / 500+	101-300 / 301-500	101-300 / 500+	301-500 / 500+
Develop a National Entry Test for Admission Into Teacher Education	1.00	1.00	.71	1.00	1.00	1.00
Require an Academic Major	1.00	1.00	.94	1.00	.04*	.86
Institute a Common Rigorous Exit/Licensure Test	.045*	.00*	.00*	.20	.03*	1.00
Require a Core in Pedagogy Based on Latest Research on Student Learning	.04*	.00*	.00*	1.00	.133	1.00
Mandate Extensive Clinical Practice "Teaching Hospital"	1.00	.20	.23	.35	.38	1.00
Total Differences	2	11	6	1	2	0

Table H. Frequencies of Responses to the Top Three Recommendations by School Leaders

Recommendation	Frequency
Mandate Extensive "Clinical" Practice for Teacher Candidates Similar to That Given Prospective Medical Practitioners. Establish "Teaching Hospitals"	45
Require Core Curricula in Pedagogy Based on the Latest Research on Student Learning	44
Require a Year-Long Teaching Internship Before Entry Into the Field	29
Require Teacher Preparation Programs to Ensure That Their Graduates are Supported, Monitored, and Mentored as They Enter the Field	28
Develop Strong Links Between Teacher Education Programs and Local School Districts	24
Organize Teacher Education Around K-12 Standards for Student Achievement	18
Develop a Standard National Entry Test for Admission Into Teacher Education that Ensures College-Level Proficiency in Math, Science, English, and the Humanities	10
Require Teacher Candidates to Have an Academic Major	10
Mandate a Core of Liberal Arts Courses in the Subject Matter	10
Institute a Higher Entry Criteria for Admission Into Teacher Education Programs (2.75 Phased Up to 3.0 at the End of Sophomore Year)	8
Graduates Licensed Based Upon Demonstrated Performance in Subject Matter and Teaching Knowledge	7
Require Program Integration Between Colleges of Arts & Sciences and Schools of Education to Enhance Preparation in Both Subject Matter and Subject Specific Pedagogy	7
Strengthen Inter-Institutional Transfer and Recruitment to Increase the Number of Candidates Entering the Field of Teacher Education	7
Institute a Common Rigorous Exit/Licensure Test	7
Ensure That Teacher Ed Programs Have Necessary Resources & Support to Assist Teacher Candidates in Becoming Proficient With Technology	6
Develop Graduate Teacher Education as the Norm for Entry Into the Field	4
Promote the Use of Shared Resources and Staff Between Teacher Education Programs and Local School Districts	4
Teacher Education Faculty Should Work With University Presidents to Take an Active Role in Shaping Public Policy Surrounding Teacher Education	3

Table H cont.

Recommendation	Frequency
Require Accountability Standards for High-Quality Teacher Preparation Similar to Those Mandated in K-12 by No Child Left Behind	2
Require Regular Campus-Wide Reviews of Teacher Education Programs	2
Close All Teacher Ed Programs That do not Have a 90% Graduate Pass Rate on State Licensure Exams	1
Establish Teacher Preparation as a University-Wide Priority With Expected Financial Support From the Institution's President and High Level Officials	1
Accreditation by a Nationally Recognized Organization	1
Commission Periodic Outside Independent Appraisals of Teacher Education Programs	0
Utilize Public Policy as a Vehicle to Enhance Teacher Education	0



Table I. Frequencies of Teacher Educator Responses to the Top Three Recommendations

Recommendation	Frequency
Mandate Extensive "Clinical" Practice for Teacher Candidates Similar to That Given Prospective Medical Practitioners. Establish Schools of Education as "Teaching Hospitals"	23
Require a Year-Long Teaching Internship Before Entry Into the Field	18
Require Core Curricula in Pedagogy for Teacher Candidates Based on the Latest Research on Student Learning	13
Establish Teacher Preparation as a University-Wide Priority With Expected Financial Support From the Institution's President and High Level Officials	12
Develop Strong Links Between Teacher Education Programs and Local School Districts Through Joint Councils and Partnerships	9
Mandate That Teacher Candidates Take a Core of Liberal Arts Courses in Order to Gain a Solid Foundation in the Subject Matter They Will Teach	9
Develop a National Entry Test for Admission Into Teacher Education That is Standard Across the Country and Ensures College-Level Proficiency in Math, Science, English, and the Humanities	7
Require Teacher Preparation Programs to Ensure That Their Graduates are Supported, Monitored, and Mentored as They Enter the Field	7
Require Teacher Candidates to Have an Academic Major in the Subject Area They Will Teach	7
Ensure That Teacher Education Programs Have the Necessary Resources and Support to Assist Teacher Candidates in Becoming Proficient With Technology	6
Accreditation by a Nationally Recognized Organization	4
Institute a Higher Entry Criteria for Admission Into Teacher Education Programs (2.75 Phased Up to 3.0 at the End of Sophomore Year)	4
Teacher Education Faculty Should Work With University Presidents to Take an Active Role in Shaping Public Policy Surrounding Teacher Ed	4
Require Program Integration at the University Level Between Colleges of Arts & Sciences and Schools of Education to Enhance the Preparation of Teachers in Both Subject Matter and Subject Specific Pedagogy	3
Graduates Licensed Based Upon Demonstrated Performance in Subject Matter and Teaching Knowledge	3

Table I cont.

Recommendation	Frequency
Organize Teacher Education Around K-12 Standards for Student Achievement	2
Institute a Common Rigorous Exit/Licensure Test	2
Develop Graduate Teacher Education as the Norm for Entry Into the Field	1
Close All Teacher Ed Programs That do not Have a 90% Graduate Pass Rate on State Licensure Exams	1
Strengthen Inter-Institutional Transfer and Recruitment to Increase the Number of Candidates Entering the Field of Teacher Education	1
Commission Periodic Independent Appraisals of Teacher Education Programs by Outside Agencies	1
Require Accountability Standards for High Quality Teacher Preparation Similar to Those Mandated in K-12 by No Child Left Behind	0
Promote the Use of Shared Resources and Staff Between Teacher Education Programs and Local School Districts	0
Utilize Public Policy as a Vehicle to Enhance Teacher Education	0
Require Regular Campus-Wide Reviews of Teacher Education Programs	0



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